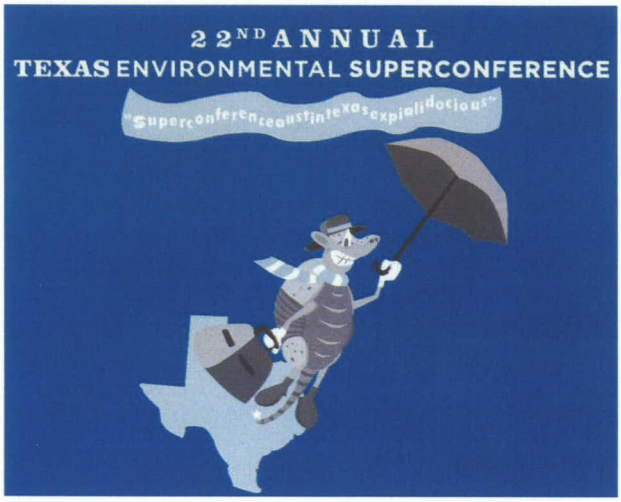
The 22nd Annual Texas Environmental Superconference
"Superconferenceaustintexasexpialidocious"



TO: Attendees

FROM: Planning Committee

DATE: August 5, 2010

On behalf of the Environmental and Natural Resources Law Section of the State Bar of Texas, the Air and Waste Management Association-Southwest Section, the Water Environment Association of Texas, the Texas Association of Environmental Professionals, the Auditing Roundtable, and the American Bar Association Section of Environment, Energy & Resources, welcome to the 22nd Annual Texas Environmental Superconference, entitled -- "Superconferenceaustintexasexpialidocious."

As always, there are evaluation forms for the program. We appreciate your taking the time to complete them. The organizers of this program take these forms into account in planning next year's conference. In addition, if you have an interest in having a particular topic presented or in speaking on a particular topic, the evaluation form is the appropriate place to provide that information. We also would appreciate suggestions for themes for next year's conference, which is scheduled for August 4-5, 2011. Please mark your calendars.

For the fifth year, we have had a Wednesday evening program. This year our program, entitled, "Bella Notte," focuses on oil and gas. If you have suggestions for next year's Wednesday evening program, please let us know.

Please provide any comments or suggestions to any member of the Planning Committee at the conference, or, thereafter, to Jeff Civins at (512) 867-8477 or jeff.civins@haynesboone.com.

Thanks!

22nd Annual TEXAS ENVIRONMENTAL SUPERCONFERENCE
"Superconferencaustintexasexpialidocious"
Thursday-Friday, August 5-6, 2010

THURSDAY, AUGUST 5, 2010

8:00 – 8:40 **Registration/Continental Breakfast** – *"Be Our Guest"*

8:40 – 9:00 **Opening Remarks** – *"Heigh Ho, Heigh Ho"*

Jeff Civins, Texas Environmental Superconference
Mike Gershon, Environmental and Natural Resources Law Section, State Bar of Texas
Cindy Smiley, Air & Waste Management Association, Southwest Section
Carol Batterton, Water Environment Association of Texas
Ed Fiesinger, Texas Association of Environmental Professionals
Michael Byington, Auditing Roundtable
Danny Worrell, ABA Section of Environment, Energy & Resources

Moderator: *Cindy Bishop, Gardere Wynne Sewell, LLP*

TAB 1 **9:00 – 9:30** **Environmental Case Law Update** – *"Bare Necessities"*
Nikki Adame-Winningham, Vinson & Elkins LLP

TAB 2 **9:30 – 10:15** **Energy of the Future** – *"A Whole New World"*
Frank Clemente, Professor of Social Science and Energy Policy, The Pennsylvania State University

10:15 – 10:30 **Break** – *"Stay Awake"*

[First Skit]

Moderator: *David Cabe, Zephyr Environmental Corporation*

TAB 3 **10:30 – 11:30** **Air Quality** – *"Colors of the Wind"*

Janis Hudson, Attorney and Technical Specialist, TCEQ
Suzanne Murray, Regional Counsel, EPA Region 6
Whitney Swift, Baker Botts, L.L.P.

TAB 4 **11:30 – 12:00** **View from DC** – *"SoThis is Love?"*

Robert Sussman, Senior Policy Advisor to Administrator, EPA DC

[Second Skit]

12:00 – 1:15 **Lunch –** *"A Rumbly in My Tumbly"*

[Turn in Disney Villain Quiz]
[Third Skit]

Moderator: *Debra Tsuchiyama Baker, Connelly Baker Wotring, LLP*

TAB 5 **1:15 – 2:15** **Water –** *"Just Around The Riverbend"*

Non-Point Source – Pinar Dogru, Jackson Walker L.L.P.
Environmental Flows – Robert J. Huston
Water Planning – Ken Petersen, General Counsel, Texas Water Development Board

TAB 6 **2:15 – 3:15** **Anatomy of a Superfund Site –** *"Dig a Little Deeper"*

Ron Gouguet, Windward Environmental, LLC
Don Pitts, Director, Trustee Assessment and Registration Program, Resource Protection Division, Texas Parks & Wildlife Department
Richard Seiler, Program Manager, Natural Resource Trustee Program, Remediation Division, TCEQ

3:15 – 3:30 **Break-***"The Mad Tea Party"*

[Fourth Skit]

Moderator: *Peter Gregg, Beveridge & Diamond, PC*

TAB 7 **3:30 –4:50** **Climate Change –** *"When I See an Elephant Fly"*

Litigation – Pat Braddock, Fulbright & Jaworski, LLP
Regulation – Jim Braddock, Haynes and Boone, LLP
SEC Disclosure – Kevin Ewing, Bracewell & Giuliani, LLP

TAB 8 **4:50 – 5:20** **Distressed Assets –** *"Strange Things"*

John Slavich, Guida, Slavich & Flores, P.C.

[Announce Disney Villain Winners]
[Turn in Disney Crossword Quiz]

5:20 – 6:00 **Reception** – *"Pink Elephants on Parade"*

FRIDAY, AUGUST 6, 2010

8:00 – 8:30 **Continental Breakfast** – *"Breakfast at Tony's"*

8:30 – 8:35 **Opening Remarks** – *"I'm Late"*

[Fifth Skit]

Moderator: *John Jacobi, US Department of Transportation*

TAB 9 **8:35 – 9:15** **Conservation Easements and Mitigation Banks** – *"Feed the Birds"*
John Dugdale, Gordon & Rees
Laura Huffman, The Nature Conservancy

TAB 10 **9:15 – 10:15** **Environmental Justice*** – *"You've Got a Friend in Me"*

Jeannine Hale, Director, Office of Environmental Justice and Tribal Affairs, EPA Region 6
Hilton Kelley, Founder & CEO, Community In-Power & Development Association, Inc.
Richard Walsh, Valero Energy Corporation

10:15-10:30 **Break** – *"Almost There"*

[Sixth Skit]

Moderator: *Mike Nasi, Jackson Walker L.L.P.*

TAB 11 **10:30 – 11:00** **Sunset Commission Update** – *"I'm Still Here"*

The Honorable Rafael Anchia, State Representative

TAB 12 **11:00 – 12:00** **Federal – State Relations** – *"Let's Get Together"*

Bryan Shaw, Chairman, TCEQ
Larry Starfield, Deputy Regional Administrator, EPA Region 6
Guest appearance by Peggy Hatch, Secretary, LDEQ

[Announce Disney Crossword Winners]
[Seventh Skit]
[Turn in Disney Trivia Quiz]
[Turn in Skit Quiz]

12:00 – 1:00 **Lunch** –*"Is It Soup Yet"*

1:00 – 1:15 State Bar Environmental and Natural Resources Law Section Meeting
"Stop, Look & Listen" – "Celebrating 40 Years"

[Announce Trivia Quiz Winners]

Moderator: *Carrick Brooke-Davidson, Guida, Slavich & Flores, P.C.*

TAB 13 **1:15 – 2:00** **State and Travis County Enforcement*** – *"Never Smile at a Crocodile"*

Moderator: Stephanie Bergeron Perdue, Deputy Director, Office of Legal Services, TCEQ
Kathleen Decker, Director, Litigation, Office of Legal Services, TCEQ
Patty Robertson, Assistant District Attorney, Chief of the Environmental Crimes Unit, Travis County

TAB 14 **2:00 – 2:30** The Department of Justice Environmental and Natural Resources Division – Its Role, Its Priorities – *"One Jump Ahead"*

Robert Dreher, Principal Deputy Assistant Attorney General, Environment and Natural Resources Division, U.S. Department of Justice

TAB 15 **2:30 – 3:30** **Environmental Ethics*** – *"I've Got No Strings"*

Helen Currie Foster, Graves, Dougherty, Hearon & Moody
Charles F. (Chuck) Herring, Herring & Irwin, L.L.P.

[Announce Skit Quiz Winners]

3:30 **Adjourn** – *"Real Gone"*
Ice Cream – *"Spoonful of Sugar"*

[COMMENT CARD DRAWING – You must be present to win]

MCLE

To obtain CLE credit, you must do 2 things: (1) sign the sign-in sheet, with your printed name, signature, Bar Card Number, and number of hours of participatory and ethics credits; and (2) enter your time on-line, in accordance with the instructions below.

Course Number: 901203816
Superconference
Participatory Hours: 12
Ethics Hours: 2

Go to www.texasbar.com and click on the yellow **MyBarPage** tab at the top of the page.
From there, you will need to log in using your bar card number and PIN.

If you have never logged in before, click the 'Proceed' button on the page and follow the instructions.

Once you are logged in, look for the link on the left-hand side of the page that reads **"View/Update My MCLE Records."**

On the next page, click on **"Add Course or Self-Study Credit"** (should be in a yellow box in the middle of the page).

On the next page, click **"Approved Course Credits."**

From here, you will enter the course number provided above, **date attended [insert here], Total Hours you attended, Ethics Hours you attended**.

Confirm that you have entered the correct number of hours. You will not be able to edit this once you submit it.

Click the **Submit** button at the bottom of the page.

On the next page, you may see a **check box** asking you to confirm (swear) your attendance.
Check the box, and click **Submit (or OK)**.

Once you have done this, your attendance should be reflected in your records.

Cynthia J. Bishop

cbishop@gardere.com

Area(s) of Expertise:

- Environmental
  - Environmental Compliance and Natural Resources Regulation
  - Environmental Litigation
- Chemical and Refining Industry Team
- Climate Change Task Force
- Energy Industry Team
- Hospitality Industry Team
- Real Estate Industry Team
- Technology Industry Team

Practice Emphasis:

Cindy Bishop provides services in a variety of environmental areas including federal and state litigation, regulatory counseling, renewable energy, and due diligence. She has defended clients in lawsuits involving groundwater, soil contamination and vapor intrusion, has negotiated settlements with government agencies regarding enforcement actions and assisted clients in obtaining environmental permits.

Before becoming an attorney, Ms. Bishop worked for seven years as an engineer for a national environmental consulting firm and is a licensed professional engineer in Texas (inactive status). She managed complex environmental projects for industrial clients, including underground storage tank compliance and removal, asbestos inspection and abatement, air permitting, and toxic chemical release inventories.

Client and Matters:

Ms. Bishop has a broad range of litigation experience and has litigated federal CERCLA contribution and cost recovery actions as well as state statutory and common law claims involving property damage and personal injury allegedly caused by contamination. She has closed impacted sites using innovative, risk-based approaches, saving one client over $4 million in estimated cleanup costs. In two separate federal cost recovery actions, she received favorable summary judgment decisions within one thirty-day period. Ms. Bishop also has resolved a variety of issues involving leaking underground storage tanks at former service stations located in many states, including Arizona, Arkansas, Illinois, Iowa, Massachusetts, Pennsylvania, Tennessee, and Texas.

Ms. Bishop's work has included negotiating with the United States Environmental Protection Agency, the Texas Commission on Environmental Quality, and other

agencies to reduce penalties assessed against industrial clients. She has assisted clients with obtaining closure approval from regulatory agencies for impacted property, including using municipal setting designations (MSD) to facilitate closure. Ms. Bishop has reviewed environmental conditions and analyzed the viability of claims under environmental insurance policies. She has also reviewed numerous environmental reports and records for properties to determine potential environmental liabilities for lenders and real estate developers and has defended potentially responsible parties in litigation with state and federal agencies to minimize the clients' liability at contaminated properties.

Education:

- J.D., Southern Methodist University Dedman School of Law (1994)
- B.S.Ch.E., The Ohio State University (1986)

Professional Affiliations:

- Admitted to practice before:
  - Texas State Courts
  - U.S. District Court for the Northern and Southern Districts of Texas
  - U.S. Court of Appeals for the Fifth Circuit
  - U.S. Supreme Court
- Member, State Bar of Texas
  - Environment and Natural Resources Section
    - Treasurer
    - Former Member, Executive Committee
- Member, Dallas Bar Association
  - Environmental Law Section
    - Former Chair
- Member, Air & Waste Management Association
- Member, American Institute of Chemical Engineers
- Member, North Texas Gas Processors Association

Honors and Awards:

- Recognized, The Best Lawyers in America (Steven Naifeh & Gregory White Smith eds., Woodward/White, Inc.) (2008 – 2010)
  - Environmental Law

Publications and Speeches:

Publications

- Co-Author with Jon Bull and Tracy Penn, EPA Sets Rules for Commercial Vessel Discharges, Gardere Client Alert, Gardere Wynne Sewell LLP, Dec. 2008.
- Author, Foraging Through the Jungle of Expert Discovery and Testimony, 4:4 Nat. Resources & Env't, Spring 2008.
- Co-Author with Richard O. Faulk, Stacy Obenhaus and Jeff Gaba, *Cooper v. Aviall:* Aviall's Brief to the U.S. Court of Appeals for the Fifth Circuit, 22:8 Toxic L. Rep. (BNA) 192 (Feb. 22, 2007).
- Co-Author with Richard O. Faulk and Celeste Quiralte, Cost Recovery Under CERCLA Section 107 After *Cooper v. Aviall*, 37:12 Envtl. Rep. (BNA) 640 (Mar. 24, 2006).
- Author, There and Back Again: The Progression and Regression of Contribution Actions Under CERCLA, Tul. Envtl. L.J. (2005).
- Co-Author with Richard O. Faulk, Disturbing Limitations on CERCLA Contribution Actions – *Aviall Services, Inc. v. Cooper Industries, Inc.*, ABA Envtl. Crimes & Enforcement Committee Newsl., Apr. 2002.
- Author, Implementing Corrective Action Under RCRA: Past, Present and Future, Envtl. Permitting, 1994.

Speeches

- Speaker, Address at the Dallas Bar Environmental Law Section Meeting: The Inside Skinny on Aviall (2005).
- Speaker, Address at Legal Issues for Texas Civil Engineers and Land Surveyors Meeting: Understanding Environmental Law (2005).
- Speaker, Address at the Law Conference for the International Council of Shopping Centers: Environmental Issues in Letters of Intent (2004).
- Speaker, Address at the Law Conference for the International Council of Shopping Centers: Protecting Yourself from Environmental Liability: Does Insurance Help? (2003).
- Speaker, Address at the North Texas Association of Environmental Professionals Meeting: Airport Air Quality Issues (Mar. 17, 2000).
- Speaker, Avoiding Enforcement (2000).
- Speaker, Address at the Dallas/Fort Worth Real Estate Council: Voluntary Cleanup Program and Innocent Operator Program Impact on Real Estate Transactions (Mar. 1999).
- Speaker, Understanding Wetlands (1999).
- Speaker, Food Safety (1998).
- Speaker, Address at the Air & Waste Management Association Annual Conference: Corrective Action Management Units (1994).

Presentations

- Speaker, Address to Confidential Client: Expert Discovery and Testimony – Avoiding Disaster (June 13, 2008) (authored paper for proceedings).
- Speaker, Address to Confidential Client: Municipal Setting Designations (June 13, 2008) (authored paper for proceedings).

- Speaker, Address at the Air & Waste Management Association Annual Conference: Environmental Liabilities – New Risks and Solutions (June 27, 2007) (authored paper for conference proceedings).
- Speaker, Address at the Asbestos Forum: Defense Strategies for Weathering the Storm of New Asbestos Claims (2005) (authored paper for forum proceedings).
- Speaker, Address at the International Petroleum Exploration Conference: Developments in The Clean Water Act (1997) (authored paper for conference proceedings).

Other Engagements

- Panel Moderator, Texas Bar Association Natural Resource Law Section Environmental Superconference (2008).
- Panel Moderator, Dallas Bar Association Environmental Law Section Meeting: What's Up With Wetlands? (2001).
- Panel Moderator, Dallas Bar Association Environmental Law Section Meeting: Impact of Recent Air Regulations on the Dallas/Fort Worth Area (1998).
- Lecturer, Address to the Tarrant County Junior College Environmental Class: Hot Topics In Environmental Law (1997).

Community Involvement:

- Scholarship Chairperson, Ohio State Alumni Club of Dallas
- Member, Advisory Board, Dallas Museum of Nature and Science

V&E

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Biography

Nikki's principal practice area is environmental law. She assists clients with environmental compliance, permitting, and enforcement matters relating to air, waste, and water.

Representative Experience

- Assisted in the representation of a Fortune 500 company in two contested case proceedings before the Texas State Office of Administrative Hearings (SOAH) and the Texas Commission on Environmental Quality (TCEQ) involving permit applications for municipal solid waste landfills
- Assisted in the representation of a large Texas utility in a contested case hearing before SOAH involving applications for air permits
- Assisted in the representation of a Fortune 500 company in navigating the permit modification process for a Texas industrial and hazardous waste landfill permit
- Assisted in the representation of an industrial client's appeal to a water conservation district regarding a water well drilling permit

Prior results do not guarantee a similar outcome.

Education and Professional Background

- Tulane Law School, J.D., Certificate Environmental Law, *cum laude*, 2004 (Senior Managing Editor, *Tulane Environmental Law Journal*; Phi Delta Phi)
- Cornell University, B.S., Civil and Environmental Engineering, 1999; M.Eng., Environmental Engineering, 2000
- Admitted to practice: Texas, 2004

Activities and Affiliations

- Member: Environmental & Natural Resources Law and Animal Law Sections, Texas Bar Association; Hispanic Bar Association of Austin; Advisory Board, *Tulane Environmental LawJournal*; Section of Environment, Energy, and Resources, American Bar Association; Environmental, Natural Resources, and Water Law, Austin Bar Association; Cornell Alumni Admission Ambassador Network

Vinson&Elkins

22nd Annual Texas Environmental Superconference

Bare Necessities

Environmental Case Law Update

by Nikki Adame Winningham

I. COMMON LAW CLIMATE CHANGE LITIGATION 2

A. SECOND CIRCUIT: *CONNECTICUT V. AMERICAN ELECTRIC POWER* 2

B. FIFTH CIRCUIT: *COMER V. MURPHY OIL USA* 4

C. WHERE DO WE GO FROM HERE? 5

II. LESSON FROM THE BENCH: DO IT RIGHT THE FIRST TIME 6

III. ENDANGERED SPECIES ACT 7

IV. NOVELTY 8

V. LOOKING AHEAD 9

V&E

22nd Annual Texas Environmental Superconference 2010
Bare Necessities
Environmental Case Law Update[1]
Presented August 5, 2010[2]

I. COMMON LAW CLIMATE CHANGE LITIGATION

> *"It may happen that new federal laws and new federal regulations may in time pre-empt the field of federal common law of nuisance. But until that comes to pass, federal courts will be empowered to appraise the equities of the suits alleging creation of a public nuisance" by greenhouse gases.*[3]

A. SECOND CIRCUIT: *CONNECTICUT V. AMERICAN ELECTRIC POWER*

Soon after last year's Superconference ended, the United States Court of Appeals for the Second Circuit issued its decision in *Connecticut v. American Electric Power* (***"AEP"***), holding that state governments and private environmental organizations may pursue nuisance claims based on federal common law against companies that emit carbon dioxide from their facilities.[4]

In this litigation, eight states, New York City, and three environmental land trusts alleged that emissions of carbon dioxide from power plants contribute to global warming, and sought to use federal common law nuisance claims to require that Defendants cap and then reduce their carbon dioxide emissions over time.[5] The District Court for the Southern District of New York, in which the lawsuit was brought, dismissed the claims as political questions.[6] The Supreme Court of the United States has identified six factors that may identify such political questions and the district court determined that one of these factors – that the case is "impossible to decide without an initial policy determination of a kind clearly for nonjudicial discretion" – applied because the determination of how to balance the need to reduce pollution with the economic impacts of emissions reductions required an initial policy determination to be made by the elected branches of government.[7]

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1 Given such a broad topic, I chose cases that either made news this year or were otherwise interesting to me.

2 Research last updated July 16, 2010.

3 *Conn. v. Am. Elec. Power*, 582 F.3d 309, 392-93 (2d Cir. 2009) (quoting *Illinois v. City of Milwaukee*, 406 U.S. 91, 92 (1972)).

4 *See id.* at 392.

5 *See id.* at 316-17; *see also Conn. v. Am. Elec. Power*, 406 F. Supp. 2d 265, 272 (S.D.N.Y. 2005).

6 *See id.* at 319-20. The political question doctrine provides that certain kinds of legal claims present non-justiciable political questions that cannot, by their nature, be decided by courts. *Id.* at 321-23.

7 *Id.* at 319.

The Second Circuit disagreed, vacated the district court's judgment, and remanded for further proceedings.[8] Specifically, the court held that:

- the district court erred in dismissing the complaints on political question grounds;
- that all Plaintiffs had standing;
- that the federal common law of nuisance governs their claims;
- that Plaintiffs have stated claims under the federal common law of nuisance;
- that their claims are not displaced; and
- that one of the defendant's alternate grounds for dismissal was without merit.[9]

Characterizing the political question doctrine as "only rarely" applied by the Supreme Court to bar adjudication of an issue,[10] the court examined each of the six factors used to describe political questions and concluded that they did not apply to the federal common law nuisance claims.[11] Analogizing Plaintiffs' claims to past interstate nuisance cases and relying on tort law, the Second Circuit held that the issues presented were judicially manageable.[12] The court further noted that when "extant statutes . . . do not [provide a remedy for] a plaintiff's claims. . ., a plaintiff is free to [apply] the federal common law of nuisance [and] is not obliged to await the fashioning of a comprehensive approach to [the matter] before it can bring an action to invoke the remedy it seeks."[13]

While the Second Circuit's determination that the claims at issue in *AEP* did not present political questions is significant, the court's resolution of standing also paves the way for future litigation. The Second Circuit determined that state governments have standing to bring this kind of lawsuit to protect the interests of their citizens (the *parens patriae* doctrine),[14] and, more significantly, that several environmental land trusts that own real property were permitted to assert claims on their own behalf due to alleged future injuries to that property.[15] Moreover, the

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8 *See id.* at 315.

9 *See id.*

10 *Id.* at 321.

11 *Id.* at 325-32.

12 *See id.* at 329-31.

13 *Id.* at 330.

14 *See id.* at 339.

15 *See id.* at 344, 349

alleged injuries associated with climate change were sufficient to establish judicial standing to assert claims against particular electric utilities.[16]

Also important, the Second Circuit recognized the continued vitality of federal common law nuisance claims and their applicability to the complex issues associated with climate change.[17] The court rejected Defendants' arguments that federal common law nuisance claims are a limited remedy available only to state governments to address relatively simple nuisance issues.[18] The court held instead that courts could apply to such claims the general standards for nuisance set forth in the Restatement of Torts and held that private parties, such as the land trusts, were able to bring such claims.[19] Finally, the court determined that the common law claims were not preempted by any extant statutes or rules, but recognized that specific climate change legislation could ultimately have that effect.[20]

B. FIFTH CIRCUIT: *COMER V. MURPHY OIL USA*

Only a few weeks after the Second Circuit issued its decision in *AEP*, the Fifth Circuit issued its decision in *Comer v. Murphy Oil USA*, a diversity suit brought under state common law between private parties for damages only.[21] The court determined that the Plaintiff property owners could pursue their public and private trespass, nuisance, and negligence claims based on *state* common law against companies that emit greenhouse gases from their facilities.[22]

The District Court for the Southern District of Mississippi, in which the lawsuit was brought, dismissed the claims with prejudice for lack of standing and as political questions.[23] Although the court did not rely on the Second Circuit's decision,[24] the Fifth Circuit applied similar analysis in disagreeing with the district court and held that Plaintiffs sufficiently demonstrated all elements of the state and federal standing requirements for public and private trespass, nuisance, and negligence[25] and that those "claims do not present any specific question that is exclusively committed by law to the discretion of the legislative or executive branch."[26]

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16 *See id.* at 340-44.

17 *See id.* at 349-88.

18 *See id.* at 353.

19 *See id.* at 370-71.

20 *See id.* at 387-88.

21 585 F.3d 855, 879 (5th Cir. 2009).

22 *See id.* at 860.

23 *See id.* at 860 & n.2.

24 *See id.* at 876 n.15.

25 *See id.* at 860-61. The court did not allow Plaintiffs to pursue a second set of claims (unjust enrichment, fraudulent misrepresentation, and civil conspiracy) due to failure to satisfy federal prudential standing requirements. *See id.* at 867-68.

26 *Id.* at 869.

The Fifth Circuit reversed the district court's judgment and remanded the surviving claims for further proceedings.[27]

After issuing its decision on October 16, 2009, the court vacated its opinion and granted a rehearing en banc on February 26, 2010.[28] Thereafter, however, new circumstances arose and an additional judge recused herself, leaving only eight judges in regular active service and eliminating the quorum.[29] "Absent a quorum, no court is authorized to transact judicial business."[30] Accordingly, a majority of the remaining judges directed a dismissal of the appeal.[31] The effect of this decision was to reinstate the district court's dismissal of Plaintiffs' suit because the court vacated the opinion of the three-judge panel when there had been a quorum.[32] The court noted, however, that the parties have the right to appeal to the Supreme Court.[33]

C. WHERE DO WE GO FROM HERE?

In *AEP*, unlike in *Comer*, the Second Circuit voted against granting a rehearing en banc. Defendants were recently granted an extension of time to file their petition for certiorari to the U.S. Supreme Court. If the Supreme Court does not grant Defendants' petition in the next term, the *AEP* case will proceed in the trial court. No petition for certiorari has yet been filed in *Comer*.

The U.S. Court of Appeals for the Ninth Circuit will also have an opportunity to weigh in on this debate potentially within the next year. On September 30, 2009, in between issuance of the *AEP* and *Comer* decisions and with complete disregard for the Second Circuit's *AEP* decision, the District Court for the Northern District of California dismissed a common law nuisance suit brought by an Alaskan village against twenty-four oil, energy, and utility companies, holding that the case presented a non-justiciable political question and that the village lacked standing because it failed to show that its alleged injuries were "fairly traceable" to Defendants' actions.[34] The court specifically rejected the *AEP* analysis, noting that the Second Circuit and the village did not offer "any guidance as to precisely what judicially discoverable and manageable standards are to be employed in resolving the claims at issue,"[35] and that their standing analyses were based on "circular" reasoning.[36] Plaintiffs appealed the

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[27] *See id.* at 880.

[28] *See Comer v. Murphy Oil USA*, 593 F.3d 208, 210 (5th Cir. 2010).

[29] *See Comer v. Murphy Oil USA*, 2010 U.S. App. LEXIS 11019, at *8 (5th Cir. May 28, 2010).

[30] *Id.*

[31] *See id.* Three of the eight remaining judges dissented from the court's dismissal order. *See id.* at *12-46.

[32] *See id.* at *11.

[33] *See id.* at *12.

[34] *See Native Village of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863, 868, 881 (N.D. Cal. 2009).

[35] *Id.* at 876.

[36] *Id.* at 880 n.7.

dismissal of their complaint to the Ninth Circuit on November 5, 2009 (No. 09-17490). The parties' opening briefs have been filed and the deadline for Appellants' optional reply brief is September 15, 2010.

II. LESSON FROM THE BENCH: DO IT RIGHT THE FIRST TIME

The National Environmental Policy Act ("***NEPA***") requires that federal agencies take a "hard look" at the environmental consequences of their projects.[37] For the last eight years, the Province of Manitoba, Canada, has been challenging the Environmental Assessment and Finding of No Significant Impact ("***FONSI***") issued by the Department of the Interior, and specifically the Bureau of Reclamation ("***Reclamation***"), for a large water transfer project designed to move water from Lake Sakakawea, a reservoir on the Missouri River, across the continental divide by pipeline for use in Minot, North Dakota.[38]

"This case demonstrates the adage that it is better to do something right the first time."[39] The first time the District Court for the District of Columbia considered this case, it ordered Reclamation to complete an Environmental Assessment and revisit its FONSI, although the court also permitted work to continue to the extent it did not affect the environment or the NEPA process.[40] This time, the court ordered Reclamation to take a "hard look" at "(1) the cumulative impacts of water withdrawal on the water levels of Lake Sakakawea and the Missouri River, and (2) the consequences of biota transfer into the Hudson Bay Basin, including Canada."[41]

The court found that the "agency cannot avoid taking a 'hard look' at water transmission risks from a pipeline breach simply because the potential for a breach does not vary under the agency's proposed alternatives."[42] While "[i]t may be that the risk of a breach is low given the pipeline's construction, . . . that is not an excuse for Reclamation to refuse entirely to analyze the *consequences*. When the *degree* of potential could be great [or] catastrophic, the *degree* of analysis and mitigation should also be great."[43] In other words, to properly evaluate whether mitigation proposals will be sufficient, the agency *must* study the potential consequences.[44]

Ultimately, the court noted that it "is acutely aware that Reclamation and North Dakota have built miles of pipeline and that the citizens of the area want the Project completed, [but] these facts do not excuse Reclamation's failure to follow the law."[45]

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[37] 42 U.S.C. § 4321 *et seq.*

[38] *Gov't of the Province of Manitoba v. Salazar*, 691 F. Supp. 2d 37, 39-40 (D.D.C. 2010).

[39] *Id.* at 51.

[40] *See id.* at 40.

[41] *Id.*

[42] *Id.* at 49.

[43] *Id.* at 50.

[44] *Id.*

[45] *Id.* at 51.

III. ENDANGERED SPECIES ACT

The Medina County Environmental Action Association ("***MCEAA***"), a group of local property owners, sued the United States, the U.S. Surface Transportation Board ("***STB***"), and the U.S. Fish and Wildlife Service ("***FWS***") claiming that the agencies did not comply with § 7 of the Endangered Special Act[46] ("***ESA***") to ensure that a proposed rail was "not likely to jeopardize the continued existence of any endangered species" before approving an exemption from other application requirements not at issue in the case.[47]

The rules implementing the ESA permit an agency to conduct a biological assessment as part of an Environmental Impact Statement ("***EIS***") prepared in compliance with NEPA.[48] STB prepared and issued three versions of its EIS: a draft, supplemental, and final EIS.[49] The EIS concluded that the proposed action was not likely to jeopardize the continued existence of the golden-cheeked warbler or any karst invertebrates, the species identified by FWS as being present in Medina County and its neighboring Bexar County.[50] MCEAA asserted that the STB and FWS failed to assess for jeopardy the entire tract proposed for development.[51]

The rules implementing ESA § 7 provide that the biological assessment "may" include "[a]n analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any studies."[52] The "effects of the action" include direct and indirect effects, "together with the effects of other activities that are interrelated or interdependent with that action."[53] Until this decision, only the Ninth Circuit had interpreted the term "interrelated action."[54] Relying on the premise that a court may defer to an agency's interpretation of its own regulations depending on "the thoroughness evident in its consideration, the validity of is reasoning, its consistency with earlier and late pronouncements, and all those factors which give it power to persuade, if lacking power to control," the Fifth Circuit turned to the FWS Endangered Species Consultation Handbook.[55] The Handbook "clarifies that the 'larger action' is the proposed action for which the agency has been called upon to grant approval."[56] Further, the preamble to the FWS rules indicate that "the 'but for' test should be used to assess whether an activity is interrelated with . . . the proposed action," which is the

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[46] 16 U.S.C. § 1536(a)(2).

[47] *Medina County Envtl. Action Ass'n v. Surface Transp. Bd.*, 2010 U.S. App. LEXIS 9326, at *2 (April 6, 2010, as revised May 6, 2010).

[48] *See id.* at *17; 42 U.S.C. § 4321 *et seq.* (NEPA); 50 C.F.R. § 402.12(g).

[49] *See id.* at *20.

[50] *See id.* at *13.

[51] *See id.* at *29.

[52] *Id.* at *32 (quoting 50 C.F.R. § 402.12(f)(4)).

[53] *Id.* (quoting 50 C.F.R. § 402.02).

[54] *See id.* at *35.

[55] *Id.* at *35 (internal citations omitted).

[56] *Id.* at *34.

definition that the Ninth Circuit previously adopted and that the Fifth Circuit adopted in this case.[57]

With these definitions in hand, the court determined that the "larger action" is the proposed rail, "the activity that the STB was called up on to approve."[58] For purposes of determining whether the proposed development of the entire tract was an interrelated action, the issue was whether, "but for the proposed rail, [would] development of the tract. . . occur."[59] Based on information provided by the developers, the STB determined that the development could proceed without the rail and would continue if the application exemption for the rail was not granted.[60] Accordingly, the STB's refusal to consider the proposed development of the entire tract as an "interrelated action" was not arbitrary or capricious.[61]

IV. NOVELTY[62]

Recently the Fifth Circuit joined the Third, Ninth, and Eleventh Circuits when it determined for the first time in a published opinion that for the toxic-emission enhancement in U.S. Sentencing Guidelines Manual ("***Guidelines***") § 2D1.1(b)(10)(A)[63] to be applicable, the government is required to prove, by a preponderance of the evidence, that the defendant violated one of the statutes listed in Application Note 19.[64]

Since 2005, the Guidelines are advisory only.[65] Section 2D1.1(b)(10)(A), the toxic-emission enhancement, states: "the base-offense level should be increased by two levels 'if the offense involved (i) an unlawful discharge, emission, or release into the environment of a hazardous or toxic substance; or (ii) the unlawful transportation, treatment, storage, or disposal of a hazardous waste.'"[66] Application Note 19 explains that the toxic-emission enhancement applies to violations of the Resource Conservation and Recovery Act (42 U.S.C. § 6928(d)), the federal Clean Water Act (33 U.S.C. § 1319(c)); the Comprehensive Environmental Response,

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[57] *Id.* at *35 (quoting 51 Fed. Reg. 19,926, 19,932).

[58] *Id.* at *36.

[59] *Id.*

[60] *See id.*

[61] *See id.* at *36-37.

[62] These decisions are more likely to be useful as cocktail trivia than in practice.

[63] Section 2D1 provides sentencing guidelines for convictions of unlawful manufacturing, importing, exporting, trafficking, or possession; continuing criminal enterprise. *See* U.S. SENTENCING GUIDELINES MANUAL Ch. 2 Part D at http://www.ussc.gov/2007guid/2d1_1.html [hereinafter GUIDELINES].

[64] *See United States v. Sauseda*, 596 F.3d 279, 282 (5th Cir. 2010). Mr. Sauseda pleaded guilty to aiding and abetting both attempting to manufacture methamphetamine and possessing a chemical to manufacture it.

[65] *See id.* at 281.

[66] *Id.* (quoting GUIDELINES § 2D1.1(b)(10)(A)).

Compensation and Liability Act (42 U.S.C. § 9603(b)); or the Department of Transportation hazardous materials statute (49 U.S.C. § 5124).

Defendant-Appellant claimed that for the toxic-emission enhancement to apply, the Government was required to prove that Defendant violated one of the statutes listed in Application Note 19, but that the Government only presented evidence of pungent fumes, which does not establish that Defendant unlawfully released a toxic substance.[67] The Fifth Circuit noted that, previously, it had never held in a published opinion what must be proven to support a toxic-emission enhancement, but that its unpublished opinions generally held that the enhancement does not apply unless the Government proves violation of one of the listed statutes in Application Note 19.[68] In light of this holding, the court affirmed the conviction but vacated the sentence and remanded the matter for resentencing.[69]

V. LOOKING AHEAD

In 2007, the Third Court of Appeals in Austin[70] held that, in making the public interest finding associated with an injection well permit, the Railroad Commission of Texas was required to consider public safety, e.g., truck traffic, even though the relevant statutory provision[71] is silent about what constitutes the "public interest." The decision, reversing the determination of the district court, raised questions about the extent to which a court should override an agency's discretion in determining what factors it must consider as part of a "public interest" determination. It also raised questions about what additional specific values or issues beyond traffic could be found by future courts to be encompassed by the phrase "public interest" in the environmental permitting context. On March 12, 2010, the Texas Supreme Court granted the Railroad Commission's and Pioneer Exploration's petitions for review of the case. Oral argument took place on April 14, 2010. Given the Texas Supreme Court's history of issuing decisions, an opinion is expected to be issued by next summer.

Although not directly, the Third Court's decision, if it stands, may reach beyond Railroad Commission injection well cases. Jurisdiction over injection wells in Texas is split between the Railroad Commission and the Texas Commission on Environmental Quality ***("TCEQ")***. The Railroad Commission has jurisdiction over injection wells used to dispose of wastes associated with the development of oil and gas;[72] TCEQ has jurisdiction over injection wells used to

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[67] *See id.* at 282.

[68] *See id.*

[69] *See id.* at 284.

[70] *Tex. Citizens for a Safe Future and Clean Water v. RRC*, 254 S.W.3d 492 (Tex. App.—Austin 2007, pet. granted).

[71] TEXAS WATER CODE § 27.051(b)(1) (requiring the Railroad Commission of Texas to make a finding before issuing a permit authorizing the disposal of oilfield waste via underground injection that use or installation of the well is "in the public interest").

[72] *See* TEXAS WATER CODE § 27.031 ("No person may continue using a disposal well or begin drilling a disposal well or converting an existing well into a disposal well to dispose of oil and gas waste without first obtaining a permit from the railroad commission.").

dispose of other kinds of wastes.[73] Texas Water Code Chapter 27 also requires TCEQ to make a "public interest" finding before issuing a permit authorizing an injection well;[74] the court's view of that requirement in the Railroad Commission context may be argued to extend to the TCEQ context. Conceivably, the Third Court's position could grow to encompass other permit decisions, too, such as when the agency is required to otherwise consider whether issuance of a permit is in the public welfare. While it is doubtful that the Texas Supreme Court will answer all of these questions, the Court's review of *Texas Citizens for a Safe Future and Clean Water* will hopefully provide clarification on what minimum requirements apply to the consideration of "the public interest" in the context of injection well permitting.

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[73] *See* TEXAS WATER CODE § 27.011 ("Unless the activity is subject to the jurisdiction of the railroad commission or authorized by a rule of the commission, no person may continue utilizing an injection well or begin drilling an injection well or converting an existing well into an injection well to dispose of industrial and municipal waste, to extract minerals, or to inject a fluid without first obtaining a permit from the commission."). In Chapter 27, "the commission" is defined as the Texas Commission on Environmental Quality. *See* TEX. WATER CODE § 27.002(1).

[74] *See* TEXAS WATER CODE § 27.051 ("The commission may grant an application in whole or part and may issue the permit if it finds: (1) that the use or installation of the injection well is in the public interest. . . .").

Frank Clemente

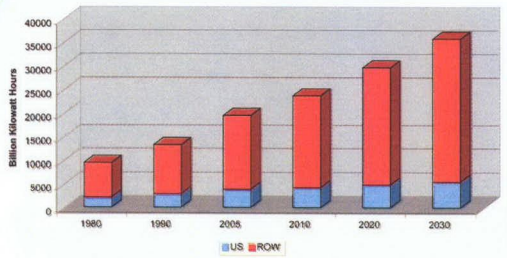
Frank Clemente is a Senior Member of the Graduate Faculty at Penn State and former Director of the University's Environmental Policy Center. Professor Clemente's research specialization is the socioeconomic impact of energy policy, especially on families, minorities, business and communities. He has published more than 100 articles in energy related media including *Public Utilities Fortnightly, Electric Light & Power, Electrical World, Nuclear News, World Oil, American Coal, Oil and Gas Journal and the Journal of Commerce.* His research has been funded by the National Science Foundation, Rockefeller Foundation and Ford Foundation. Professor Clemente was first listed in the Social Science section of *American Men and Women of Science* in 1979. He has a doctorate in demography from the University of Tennessee. The Senior Class of 2008 voted him "Best Professor" at Penn State.

Electricity is the means to a better life across the world

"Our success in leveraging economic gains from digital technology for social and environmental gains, will depend first and foremost upon creating available, reliable and affordable electric systems worldwide" Electric Power Research Institute, 2004

Frank Clemente Ph.D.
Professor of Social Science
Penn State University

Steady Global Drumbeat Of Electricity Demand



Note: At least 2 billion people do not have adequate access to electricity and 1.5 billion more have none at all.

The Unique Attributes of Electricity

- High quality – convertible to virtually any energy service – light, motion, heat, electronics and chemical potential
- Permits previously unattainable precision, control and speed
- Provides temperature and energy density far greater than those attainable from standard fuels
- Has no inertia - instantaneous access and 100% convertible to work

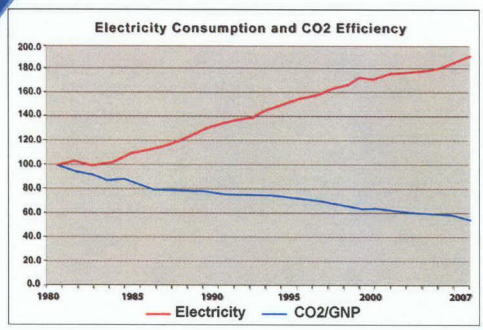
Technologies in the Electricity Sector Could Reduce CO_2 Emissions by 45% by 2030

- Advanced clean coal technologies
- Carbon capture and sequestration
- Energy Efficiency
- Electrotechnology deployment
- Electric Transportation- PHEVs and electric trains

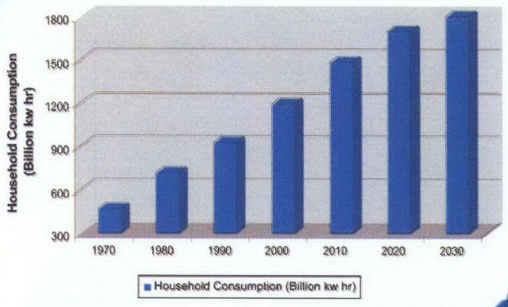
"Electrification increases the efficiency of society's primary energy consumption and reduces emissions of pollutants and greenhouse gases" -EPRI

Source: EPRI

More Electricity Means Less CO2 per GNP



U.S. Household Consumption of Electricity



The Pervasive Role of Electricity in the American Quality of Life

Electric Based Item	Millions of Units
Electric Heat	37
Air Conditioner	106
Refrigerator	115
Electric Oven	73
Electric Range	66
Electric Dryer	73
Water Heater	45
Dishwasher	73

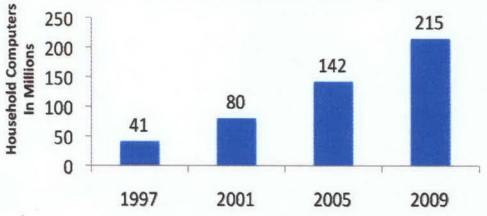
Over the eight year period 2001-2009, U.S. households added 36 million air conditioners, 12 million electric driers and 8 million refrigerators

Note: Estimates from EIA, Residential Energy Consumption Survey, 2008

7

Home Computers Have Become An Integral Part Of American Life

The United States now averages over two computers per household (excludes office computers)



Adapted From EIA Residential Energy Consumption Survey, 2009 Estimated

8

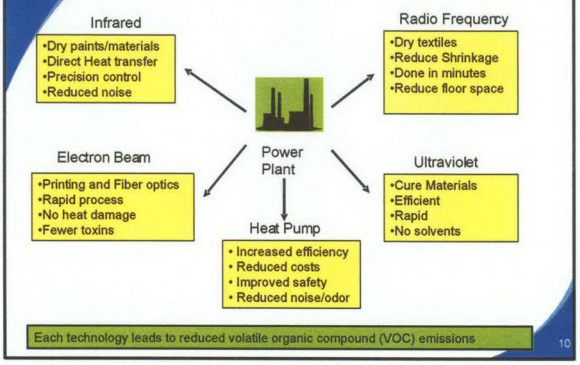
Electrotechnologies Benefit Both the Environment and the Economy

- Electrotechnologies are more efficient than their fuel-burning counterparts
- As we implement electrotechnologies the less CO_2 we produce per GNP unit
- Thus, increasing the price of electricity to reduce consumption is counterproductive
- Reduced electricity prices will accelerate the use of electrotechnologies, thereby improving both the environment and the economy

"Technology innovation in electricity use is a cornerstone of global economic progress (and) environmental benefits"-EPRI

9

Electro-technology: a Cleaner Environment, Increased Efficiency, Higher Productivity



Each technology leads to reduced volatile organic compound (VOC) emissions

10

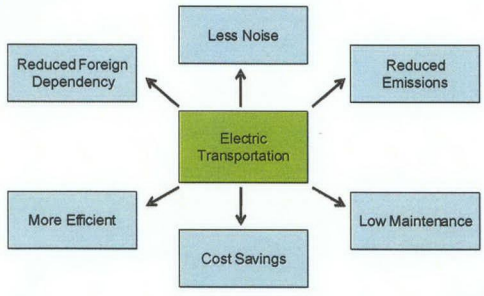
Electric Transport

"We will commit ourselvesto getting one million 150 mile-per-gallon plug-in hybrid cars on ourroads within six years." Barack Obama

"The time is right now forus to start thinking about high-speed rail asan alternative...And think about what a geat project that would be in terms of rebuilding America." Barack Obama

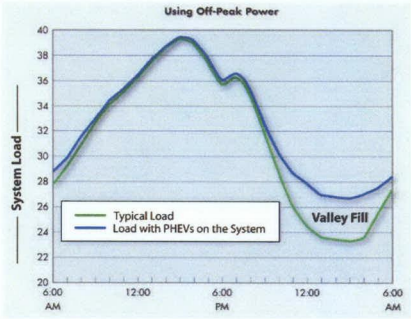
11

Electric Vehicles



12

Typical Impact on the Electric System Load



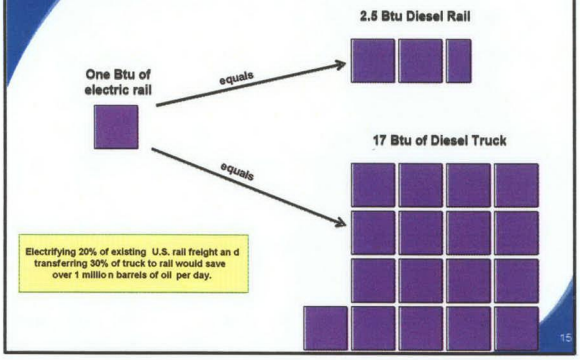
13

The benefits of electric rail

- Will reduce oil imports between 1- 3 million barrels per day
- Electric locomotives have twice as much tractive power as diesel
- Electric locomotives are ideal for multi-stops and starts
- Will reduce GHG emissions by a factor of eight or more
- Requires no new technology– there is a vast base of experience around the world

14

Electric Freight Trains Are Far More Efficient Than Truck or Diesel Rail



15

David Cabe is the Principal Engineer of Zephyr Environmental Corporation. As an air quality consultant, he has prepared hundreds of air quality permit applications, environmental impact statements, air dispersion modeling studies, and air quality monitoring plans, and provided expert witness services for clients throughout the United States. Mr. Cabe holds the degrees of Bachelor of Engineering Science and Master of Science in Environmental Health Engineering from the University of Texas at Austin and has authored numerous papers in the areas of air pollution meteorology and dispersion modeling.

22nd Annual Texas Environmental Superconference
Air Quality Panel
August 5, 2010

Colors of the Wind
"we need to sing
with all the voices of the mountains,
we need to paint
with all the colors of the wind"

Janis Hudson, Attorney & Technical Specialist, TCEQ
Suzanne Murray, Regional Counsel, EPA Region 6
Whit Swift, Baker Botts LLP

Colors of the Wind - 2010

- NAAQS Developments
- Texas State Implementation Plan (SIP) Developments
  - The SIP GAP
  - Public Participation
  - Qualified Facilities
  - Flexible Permits
  - Planned MSS Activities
- Texas Title V Program
- Communications

NAAQS Developments

	Lead	NO_2	SO_2	Ozone	CO	$PM_{2.5}$
Proposal, Final dates	5/20/08, 10/12/08	7/15/09, 2/9/10	12/8/09, 6/22/10	1/19/10, *8/31/10*	*10/28/10, 5/13/11*	*1/2011, 10/2011*
Level or Expected Level	0.15 $\mu g/m^3$ 3-month average	100 ppb, 1-hour average (3 year, 98th percentile test)	75 ppb, 1-hour average (3 year, 99th percentile test)	60-70 ppb, 8-hour average (3 year, 4th highest day test)	3-9 ppm 8-hour average, 5-15 ppm 1-hour average (99th percentile daily average)	11-13 $\mu g/m^3$ annual average
Expected Attainment Dates	5 years after designation	1/2017	Summer 2017	8/2014 – 8/2031	Summer 2018	10/2018
Developments in last 3 Months	*Coalition of Battery Recyclers Ass'n v. EPA*	Texas minor NSR and MSS implementation	–	Briefings on possible implementation rule		–

Texas SIP: The GAP

- Common name for differences in rules or other enforceable measures between what was adopted by the state and what EPA has approved
- EPA was sued in 2008 for not acting on TCEQ rule adoptions
- EPA agreed to take actions on rule adoptions per schedule
- EPA has proposed final actions on various rules in Spring 2010
- TCEQ has agreed to revise rules based on schedule

Texas SIP: Public Participation

October 1999
TCEQ submits most of its public participation rules to EPA for approval

November 2008
EPA proposes limited approval / limited disapproval for rules (73 Fed. Reg. 72001)

January 2010
TCEQ proposes amendments to Texas publicparticipation rules (35 Tex. Reg. 306)

June 2010
Amendments to Texas public participation rules go into effect June 24 (35 Tex. Reg. 5198)

Texas SIP: Qualified Facilities

March 1996
TCEQ submits rules to EPA for review

September 2009
EPA proposes disapproval of rules (74 Fed. Reg. 48450

March 2010
TCEQ proposes revisions to rules (35 Tex. Reg. 2978)

April 2010
EPA issues final disapproval of rules (75 Fed. Reg. 19468)

September 2010
TCEQ schedules qualified facility rule revisions for adoption

Texas SIP: Flexible Permits

November 1994
TCEQ submits rules to EPA for review

September 2009
EPA proposes disapproval of rules (74 Fed. Reg. 48450)

June 2010
TCEQ proposes revisions to the rules (35 Tex. Reg. 5729);
EPA proposes voluntary audit program for flexible permit holders

July 2010
EPA issues final disapproval of the rules (75 Fed. Reg. 41312);
TCEQ proposes voluntary permit "deflexing" options to EPA

December 2010
TCEQ schedules flexible permit rule revisions for adoption

Texas SIP: Planned MSS

January 2006
TCEQ proposes rule changes to provide affirmative defense against civil penalties for excess emissions during planned maintenance, startup, or shutdown activities

May 2010
EPA proposes disapproval of planned MSS provisions of rules (75 Fed. Reg. 26892)

September 2010
TCEQ schedules proposal for mandating MSS authorizations

Title V Permits

October 2009
EPA sends letters to TCEQ objecting to issuance of Texas Title V permits for first of 39 facilities, continuing with objections through Spring 2010

May 2010
EPA indicates intent to takeover Title V permitting for multiple facilities

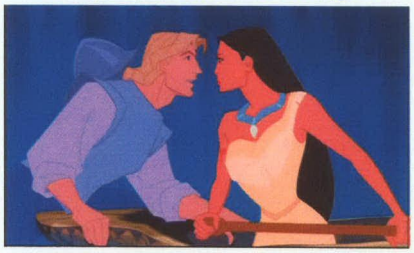
June 2010
EPA notifies three Texas Title V permit holders of requirement to apply for Part 71 Title V permits by September 15

July 2010
TCEQ completes of responses to majority of EPA objection letters ;
EPA issues letter to one of the three Title V permit holders relaxing September application deadline based on willingness to work cooperatively

Texas/EPA Ongoing Discussions

- Biweekly calls and other meetings with EPA Region 6, HQ, and OAQPS
- Primary Focus: Title V objection letters and flexible permits
- Archive of correspondence with EPA and TCEQ about Texas air permitting programs found at
  http://www.tceq.state.tx.us/permitting/air/announcements/nsr_announce_9_5_07.html

"Can you feel the love tonight?"



Or.....

Janis Boyd Hudson
Environmental Law Division
Office of Legal Services
Texas Commission on Environmental Quality

Texas Commission on Environmental Quality (and predecessor agencies)
Staff Attorney - Technical Specialist, 2001 - present / Staff Attorney, 1993 – 2001
Hearing Examiner, 1992-1993

Primary experience includes working on most aspects of air quality and administrative law, including new source review air quality permitting; contested case hearings regarding air quality permits; nonattainment and maintenance State Implementation Plans; rulemaking (permitting, emission controls, enforcement and procedural rules); assisting the Office of Attorney General with litigation in state and federal courts; legislative drafting and bill analysis; counseling on enforcement issues; and other program support such as negotiation with EPA, regulated industry and the public; participation in public meetings; and development and presentation of training to TCEQ legal and technical staff.

South Texas College of Law, Houston, Texas, JD, 1990
University of Texas at Austin, Austin, Texas, BBA, 1979
Board Certified, Administrative Law, Texas Board of Legal Specialization 2000, Recertified 2005

Colors of the Wind: *Some of the* Current Air Quality Issues July 2010

Janis Hudson
Environmental Law Division
TCEQ Office of Legal Services

Colors of the Wind

You think I'm an ignorant savage
And you've been so many places
I guess it must be so
But still I cannot see
If the savage one is me
How can there be so much that you don't know?
You don't know ...

SIP Gap - Background

- SIP Gap – Common name for the difference in rules or other enforceable measures adopted by the state as revisions to the State Implementation Plan (SIP) and the EPA-approved SIP.
- BCCA Appeal Group, Texas Assn. of Business and Texas Oil and Gas Assn sued EPA in August 2008 for EPA's failure to perform its non-discretionary duty to act on all or part of numerous TCEQ rule adoptions from 1993 – 2007 which were pending EPA review.
- EPA agreed to take final actions on outstanding rules per schedule (November 2009 - December 2013) in consent decree and settlement agreement.
- EPA has proposed approval and taken final action to approve various rules in Spring 2010.
- EPA published four *Federal Register* notices with some form of proposed disapproval in Nov. 2008 and Sept. 2009.
- TCEQ agreed to revise these rules based on schedule (See TCEQ letter to EPA October 23, 2009).

TCEQ Rulemakings in Response to EPA Proposed Disapproval Notices

You think you own whatever land you land on
The Earth is just a dead thing you can claim
But I know every rock and tree and creature
Has a life, has a spirit, has a name

- Public Participation
- Qualified Facilities
- Flexible Permits
- NSR Reform

See Texas' Air Permitting Program: Notice to the Regulated Community regarding Public Participation, Flexible Permits, Qualified Facilities, and New Source Review (NSR) Reform at:
http://www.tceq.state.tx.us/permitting/air/announcements/20091109

Public Participation

You think the only people who are people
Are the people who look and think like you
But if you walk the footsteps of a stranger
You'll learn things you never knew you never knew

- TCEQ submitted (most of) the rules to EPA in October 1999 (HB 801).
- EPA proposed partial approval / partial disapproval in *Federal Register* November 26, 2008.
- Plaintiff industry groups and EPA agreed to change the final action date from November 30, 2009 to September 29, 2010.
- Amended and new rules adopted by TCEQ on June 2, 2010, submitted to EPA on July 2, 2010.
- Changes apply to applications filed on or after the effective date of the rule, June 24, 2010.

Public Participation

Key topics in the rulemaking:

- In many cases, minor sources that are subject to Chapter 39 will be required to conduct 2nd notice
- If a request for a contested case hearing is not received, one will not be available for minor sources once the 30-day NORI comment period has expired (no change)
- All Responses to Comment (RTCs) will be routed to the Office of the Chief Clerk (OCC) for Web posting (in effect for all TCEQ RTCs since January 2010)
- The TCEQ must respond to all comments before approval of a PSD/NA application (long term practice of TCEQ now codified)
- For PSD/NA permits, the draft permit, PDS, and Air Quality Analysis will be posted to the Web (by OCC)
- For PSD/NA permits, if an interested person requests a public meeting, TCEQ must hold one

Public Participation

- What remains the same within the public notice rule revisions?
  - Notice requirements for permit renewals
  - The insignificant and *de minimis* notice thresholds for amendments
    - Note: These rules are now submitted to EPA for the first time
  - The contested case hearing request process
  - Notice procedures for concrete batch plants (not enhanced control, that are not subject to CCH)
- Brief overview of the requirements for Air Permit Applications on APD web page:
  - http://www.tceq.state.tx.us/permitting/air/bilingual/how1_2_pn.html

Qualified Facilities

Have you ever heard the wolf cry to the blue corn moon
Or asked the grinning bobcat why he grinned?

- TCEQ submitted the rules to EPA in March 1996
- EPA proposed disapproval September 23, 2009; final disapproval of rules published April 14, 2010, effective May 14, 2010.
- TCEQ proposed rule amendments
  - Clarify QF is a minor NSR permit program
  - Clarifies federal applicability
  - Make argument for no backsliding
  - Includes proposed amended definition of BACT to more clearly state how that Texas Clean Air Act requirement is implemented
  - Proposed March 30, 2010, scheduled for adoption September 15, 2010

Flexible Permits

Can you sing with all the voices of the mountains?
Can you paint with all the colors of the wind?

Current Rules:

- Allow for emissions caps at a site rather than individual limits for individual pieces of equipment
- Nothing in federal law prohibits this concept
- Over control some equipment while not adding additional controls to other equipment as long as total emissions are under cap
- Caps based on what emissions would be if BACT was applied to all equipment under the cap
- Permits are protective of public health
- Permits do not allow for circumvention of federal law

Flexible Permits

- TCEQ submitted the rules to EPA in November 1994
- EPA proposed disapproval September 23, 2009; final disapproval of rules published July 15, 2010, effective August 16, 2010.
- TCEQ proposed rule amendments
  - Clarify federal applicability
  - PAL-like monitoring, testing, recordkeeping, and reporting requirements
  - Eliminate 9% insignificant emissions factor
  - "Source caps" or "site wide caps"
  - Shutdown duration that triggers a change in caps revised from 12 months to 6 months
  - Proposed June 16, 2010, scheduled for adoption December 1, 2010

New Source Review Reform

Come run the hidden pine trails of the forest
Come taste the sun sweet berries of the Earth
Come roll in all the riches all around you
And for once, never wonder what they're worth

- TCEQ submitted rules to EPA June 2005 and February 2006
- EPA proposed disapproval on September 23, 2009; final action due August 31, 2010
- TCEQ conducting three rulemakings in response
  1. Adopted re-incorporation of 40 CFR 52.21 (b)(12) and (r)(4) and added (j) on June 2, 2010 (effective June 24, 2010), submitted to EPA July 16, 2010.

     Two proposed rulemakings scheduled for proposal August 11, 2010; adoption tentatively scheduled for January 26, 2011
  2. Clarify/correct/incorporate by reference PAL requirements
  3. Address 1-hour/8-hour ozone issue

Discussions with EPA

The rainstorm and the river are my brothers
The heron and the otter are my friends
And we are all connected to each other
In a circle, in a hoop that never ends

Bi-weekly calls and other meetings with Region 6, EPA HQ, and OAQPS

- Primary Focus: Title V Objection Letters and Flexible permits
  - How to "de-flex" a permit
  - Met with EPA June 3, 2010 and made a demonstration that existing flexible permits are practically enforceable
- Correspondence between EPA and TCEQ regarding Texas Air Permitting Program
  - http://www.tceq.state.tx.us/permitting/air/announcements/nsr_announce_9_5_07.html
  - Recent letters of interest:
    May 14, 2010 Letter from EPA - Flexible Permitting Issues, including BACT
    July 6, 2010 TCEQ Letter to EPA - Voluntary 'De-Flex' Options

Title V Objections

How high will the sycamore grow?
If you cut it down, then you'll never know

And you'll never hear the wolf cry to the blue corn moon

39 companies have received objections; TCEQ is submitting responses
- http://www.tceq.state.tx.us/permitting/air/announcements/tv_announce_05_27_10.html

- EPA Part 71 Letters to Holders of Federal Operating Permits (three issued as of July 15, 2010)
  - http://www.tceq.state.tx.us/permitting/air/announcements/tv_announce_06_18_10.html
- TCEQ expects more objections and more 'federalization'

Federal Action Challenges by Texas

For whether we are white or copper skinned
We need to sing with all the voices of the mountains
We need to paint with all the colors of the wind

Greenhouse Gas:

1. Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Federal Clean Air Act

Petition to EPA for Reconsideration, filed February 16, 2010.
Status: Pending before EPA.
Petition for Review, U.S. Court of Appeals, D.C. Circuit, filed February 16, 2010.
Status: Consolidated with several cases; Motions to Remand to EPA to adduce additional evidence denied on 6/16/10; consolidated cases held in abeyance until 14 days after EPA decision on reconsideration petitions, or 8/16/10, whichever is earlier.

Federal Action Challenges

Greenhouse Gas (continued)

2. "Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs, Final Rule", i.e. Johnson Memo

Petition to EPA for Reconsideration, filed June 1, 2010.
Status: Pending before EPA
Petition for Review, U.S. Court of Appeals, D.C. Circuit, filed June 1, 2010.
Status: Filed with Alabama, Nebraska, North Dakota, South Carolina, South Dakota, Virginia, Haley Barbour, Gov. of Mississippi; No briefing schedule yet.

Federal Action Challenges

Greenhouse Gas (continued)

3. Emission Standards for Cars and Light Duty Vehicles
   Petition for Review, U.S. Court of Appeals, D.C. Circuit, filed July 7, 2010.
   Status: Filed with Alabama, Nebraska, North Dakota, South Carolina, South Dakota, Virginia

TCEQ Rule Disapproval:

- Petition for Review, of EPA's final action to disapprove revisions to the SIP that relate to the Modification of Existing Facilities (Qualified Facilities Program), filed June 14, 2010
- Court consolidated all challenges (TXOGA, BCCAAG, TAM and Texas) into single proceeding

Emissions Event Rules

- TCEQ submitted amended rules regarding reporting of certain excess emissions to EPA January 2006
- EPA proposed approval of all rules on April 13, 2010, except proposed disapproval of § 101.222(h) – (j), which concern the schedule for phase-out of an affirmative defense for planned maintenance, startup and shutdown (MSS) emissions.
- EPA scheduled to take final action on October 31, 2010.

Selected Other Current and Upcoming Air Permit Rulemaking and New Standard Permits

1. Proposal: Oil and Gas Amendments to Permit by Rule and Repeal of Standard Permit, July 28, 2010 agenda. New O&G Standard Permit scheduled for publication August 13, 2010
2. Adoption: Agricultural Permit by Rule (PBR) Revisions July 28, 2010
3. Proposal: New Pollution Control Standard Permit scheduled for publication August 27, 2010
4. Adoption: Preventing Circumvention of New Source Review Public Participation by Use of Standard Permits and Permits by Rule, September 15, 2010 agenda
5. Proposal: Require authorization of MSS emissions in permits, September 29, 2010 agenda
   - Guidance to assist with issues regarding permitting of emissions from MSS activities
     - http://www.tceq.state.tx.us/permitting/air/mss.html
6. Proposal: Implementation of PM2.5 requirements in NSR permitting, October 27, 2010.

You can own the Earth and still
All you'll own is Earth until
You can paint with all the colors of the wind

Colors of the Wind, composer Alan Menken and lyricist Stephen Schwartz
1995 Oscar-winner for Best Original Song from the Disney animated feature film *Pocahontas*

Suzanne Murray

Suzanne graduated from Trinity University in San Antonio with a BA in Political Science and Minor in Spanish. She received her law degree from the University of New Mexico where she was the Editor of the Natural Resource Law Journal. After law school she moved to New York where she interned for two federal court judges, Reena Raggi and Michael Dollinger, and then began private practice. During that time she was in-house counsel for the AIG Environmental Claims Group and associated with the law firm of Rosenman and Colin in the Environmental Law and Litigation groups.

In 1997 she moved to Dallas and began practice with EPA Region 6. During that time she worked in the Enforcement and Counselling groups with particular focus on CAA issues. She served as Deputy Regional Counsel for Enforcement from 2005 to 2008. In October of 2008 she was appointed as Regional Counsel for Region 6.

She lives in Dallas with her husband and three daughters. She enjoys travelling, cooking and learning languages.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

APR - 1 2010

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Applicability of the Federal Prevention of Significant Deterioration Permit Requirements to New and Revised National Ambient Air Quality Standards

FROM: Stephen D. Page, Director
Office of Air Quality Planning & Standards (C404-04)

TO: Air Division Directors and Deputies
Regions I - X

This memorandum responds to inquiries that we are receiving from parties who are currently developing or reviewing applications for Prevention of Significant Deterioration (PSD) permits under the Clean Air Act (CAA) requesting that the Office of Air and Radiation (OAR) provide guidance on the applicability of PSD permitting requirements to a newly promulgated or revised National Ambient Air Quality Standard (NAAQS or standards). Accordingly, I am writing to reiterate the Environmental Protection Agency's (EPA's) existing interpretation of the relevant provisions of the CAA and EPA regulations, and EPA's position on how these requirements apply under the federal PSD program.

General Applicability of PSD Permit Requirements to New or Revised NAAQS

The CAA requires that proposed new and modified major stationary sources must, as part of the issuance of a permit to construct, demonstrate that emissions from the new or modified major source –

> will not cause, or contribute to, air pollution in excess of any
> (A) maximum allowable increase or maximum allowable concentration for any pollutant in any area to which this part applies...;
> (B) national ambient air quality standard in any air quality control region; or
> (C) any other applicable emission standard or standard of performance under this chapter;

CAA §165(a)(3). Similarly, EPA's federal PSD program regulations at 40 CFR 52.21(k)(1) require proposed sources and modifications to demonstrate that their allowable emissions will not cause or contribute to a violation of "any national ambient air quality standard in any air quality control region."

EPA generally interprets the CAA and EPA's PSD permitting program regulations to require that each final PSD permit decision reflect consideration of any NAAQS that is in effect at the time the permitting authority issues a final permit. As a general matter, permitting and licensing decisions of regulatory agencies must reflect the law in effect at the time the agency makes a final determination on a pending application. See *Ziffrin v. United States*, 318 U.S. 73, 78 (1943); *State of Alabama v. EPA*, 557 F.2d 1101, 1110 (5th Cir. 1977); *In re: Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 614-616 (EAB 2006); *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 478 n. 10 (EAB 2002).

Consistent with such interpretations, EPA has previously concluded that the relevant provisions cover any NAAQS that is in effect at the time of issuance of any permit. For example, in the context of applying the PSD provisions to the NAAQS for particulate matter less than 2.5 micrometers ($PM_{2.5}$), EPA has stated that "section 165 of the CAA suggests that PSD requirements become effective for a new NAAQS upon the effective date of the NAAQS." 73 FR 28321, 28340, (May 16, 2008); 70 FR 65984, 66043, (Nov. 1, 2005). That observation was based, in part, on EPA guidance for implementing the $PM_{2.5}$ NAAQS that the Agency issued shortly after those standards first became effective in 1997. John Seitz, EPA Office of Air Quality Planning and Standards, "Interim Implementation for the New Source Review Requirements for $PM_{2.5}$" (Oct. 23, 1997). Both the 1997 guidance and EPA's final rule addressing the application of the PSD program to $PM_{2.5}$ explained that section 165(a)(1) of the CAA provides that no new or modified major source may be constructed without a permit that meets all the requirements in section 165(a). In addition, those documents observe that one such requirement is the provision in section 165(a)(3) which says that emissions from such source may not cause or contribute to a violation of any NAAQS. The October 23, 1997 guidance provided an interim policy for assuring compliance with the requirements for $PM_{2.5}$, after observing that the "new NAAQS for $PM_{2.5}$, became effective on September 16, 1997." In addition, the guidance expressed EPA's intent to provide a separate memorandum that would address "EPA's views on implementing the ozone and PM_{10} NAAQS during the interim period following *the effective date* of the new 8-hour ozone and revised PM_{10} NAAQS." [Emphasis added.] Those statements made shortly after the promulgation of new NAAQS in 1997 are consistent with the view expressed in the final rule for $PM_{2.5}$ in 2008 that "PSD requirements become effective for a new NAAQS upon the effective date of the NAAQS."

Additional precedent for this interpretation can be found in the 1987 final rule titled "Regulations for Implementing Revised Particulate Matter Standards" (52 FR 24672. July 1, 1987) issued at the time EPA established new PM_{10} standards. In that rule, EPA stated that "once the PM_{10} NAAQS becomes effective, EPA will be responsible for the protection of the PM_{10} NAAQS as well as the review of PM_{10} as a regulated pollutant." 52 FR at 24682. In support of that conclusion, EPA observed that the federal

PSD regulations at 40 CFR 52.21(k)(1) contain "a general provision requiring prospective PSD sources to demonstrate that their potential emissions will not cause or contribute to air pollution in violation of 'any' NAAQS." Id. at 24682 n. 9. Based on that analysis, EPA concluded that "[w]hen the revised NAAQS for particulate matter becomes effective, each PSD application subject to EPA's Part 52 PSD regulations, and not eligible to be grandfathered under today's action, must contain a PM_{10} NAAQS analysis." 52 FR at 24684.

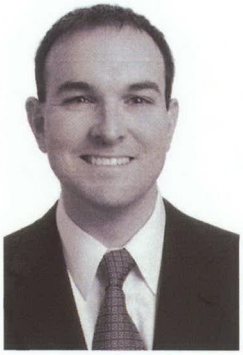
As illustrated above, under certain circumstances EPA has previously allowed proposed new major sources and major modifications that have submitted a complete PSD permit application before the effective date of new requirements under the PSD regulations, but have not yet received a final and effective PSD permit, to continue relying on information already in the application rather than immediately having to amend applications to demonstrate compliance with the new PSD requirements. In the transition from the total suspended particulate NAAQS to the PM_{10} NAAQS, EPA explicitly established rule provisions that allowed proposed new major sources and major modifications that had submitted a complete PSD permit application before the effective date of new PM_{10} NAAQS, but that had not yet received a final and effective federally-issued PSD permit, to continue relying on information already in the submitted application rather than immediately having to amend applications to demonstrate compliance with the new PSD requirements. *See*, e.g., 40 CFR 52.21(i)(1)(x). EPA has adopted similar provisions pertaining to new or revised PSD increments. 40 CFR 52.21(i)(9)-(10). Those proposed sources and modifications meeting these transition requirements were "grandfathered" or exempted from the new PSD requirements that would otherwise have applied to them. Thus, while we have included the necessary provisions to grandfather sources from new requirements under certain circumstances, we have not always chosen to do so for NAAQS revisions in general.

Applicability of the New 1-Hour NO_2 NAAQS to Existing Permit Applications

On January 22, 2010, the EPA Administrator signed a final rule containing a new NAAQS for nitrogen dioxide (NO_2) based on a 1-hour averaging time. That final rule was published in the Federal Register on February 9, and will become effective on April 12, 2010. EPA did not promulgate a grandfathering provision related to the 1-hour NO_2 NAAQS for permits in process but not yet issued as of April 12, 2010. Accordingly, permits issued under 40 CFR 52.21 on or after April 12, 2010, must contain a demonstration that the source's allowable emissions will not cause or contribute to a violation of the new 1-hour NO_2 NAAQS. In the case of the new NO_2 1-hour NAAQS, while the short-term standard is new, the pollutant is not, having been considered a regulated pollutant for many years pursuant to the NO_2 annual NAAQS. There are no exceptions under 40 CFR 52.21 in this case because as noted above, EPA has not adopted a grandfathering provision applicable to the 1-hour NO_2 NAAQS that would enable the required permit to be issued to prospective sources in the absence of such ambient air quality demonstration.

cc: Jeff Clark
Anna Wood
Peter Tsirigotis
Lydia Wegman
Richard Wayland

BAKER BOTTS



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Summary

Whit Swift counsels industrial clients on a variety of environmental matters involving state and federal air, water and waste regulations, with a focus on regulatory assistance and permitting under the Texas Clean Air Act and the federal Clean Air Act.

His permitting work includes serving as counsel for air quality permit applicants in contested case proceedings before the Texas Commission on Environmental Quality and the Texas State Office of Administrative Hearings. He also counsels clients on complex permitting and compliance issues, and has represented clients in responding to and negotiating with the U.S. Environmental Protection Agency following the receipt of new source review-related information requests served under Section 114 of the federal Clean Air Act. Mr. Swift has also counseled clients on crisis management and prevention, and has assisted clients in conducting internal investigations of alleged wrongdoing.

Mr. Swift regularly assists clients with reporting and compliance matters arising under the Title V operating permit program, and has tracked the development of both the federal and state Title V programs. He has given a number of talks regarding the Title V program and permit holders' obligations under the program, and is a co-author of the air quality chapter in the Environmental Law volume of West Publishing Company's *Texas Practice* series.

"I JUST CAN'T WAIT TO BE KING": EPA ASSERTS TITLE V AUTHORITY IN TEXAS

By Whitney L. Swift

July 16, 2010

Abstract

The Texas Commission on Environmental Quality ("TCEQ") has, since 2001, implemented a Title V operating program with full federal approval. In 2009 and 2010, however, U.S. Environmental Protection Agency ("EPA") Administrator Lisa Jackson and EPA Region 6 have combined to issue 41 objections to Texas Title V permit actions. EPA Region 6 has also, for three Texas Title V permit holders, asserted the powers granted it by the federal and Texas Title V rules to take over as Title V permitting authority, where the TCEQ had not timely presented EPA with a response and revised permit that addressed EPA's objections.

The majority of the Title V permit objections are properly considered "programmatic," in that the position taken by EPA Region 6 in the objection letter applies equally to most, if not all, Texas Title V permits -- including the hundreds of permits *not* subject to an EPA objection. EPA has also used Title V objections to raise issues relating to the "State Implementation Plan ("SIP") gap" associated with TCEQ's flexible permit program and rules relating to "qualified facility" flexibility. Those objections apply equally to any Texas permit holder that has been issued a flexible permit or authorized a change under qualified facility flexibility.

This paper reviews the federal approval history of the Texas Title V program. It also discusses EPA's authority to issue objections to individual Title V permit actions and how the issuance of an objection can affect an individual permit holder. It also briefly reviews the programmatic Title V objections made by EPA and the responses to those objections that have been filed by the TCEQ Executive Director.

The surge of EPA Title V objections and more-recent Part 71 takeovers of three Texas Title V permits has led to a great deal of uncertainty for Texas Title V permit holders. Unfortunately for those permit holders, there are currently more questions than answers. This paper concludes by looking at some of those questions, including: whether EPA's use of individual permit objections is the proper mechanism to address programmatic Title V permit and SIP gap issues; why well-established elements of the approved Texas program are suddenly the basis for Title V objections; and whether EPA is properly asserting its Title V permit takeover authority under 40 C.F.R. Part 71.

EPA Asserts Title V Authority in Texas

I. Texas Title V Program Approval, Implementation and Oversight: State and Federal Roles

A. EPA's Role in Program Approval and Oversight

The federal operating permit program, commonly known as the "Title V" program due to its home in Title V of the federal Clean Air Act ("FCAA") amendments of 1990,[1] requires "major sources"[2] of air pollution to obtain operating permits ("Title V permits") that identify all of the air-quality related "applicable requirements"[3] that govern the source. Title V permit holders must self-report all deviations from those air quality-related applicable requirements and, on an annual basis, certify continuous compliance with those requirements for which the permit holder has not reported a deviation.[4]

The FCAA and EPA's implementing regulations at 40 C.F.R. Part 70 establish state (or local) permitting authorities as responsible for the implementation of the Title V program. The state program must, however, meet the minimum operating permit program requirements of Title V of the FCAA and Part 70. And while Title V programs are not required to be approved elements of a State Implementation Plan ("SIP"), the FCAA and Part 70 require that state Title V programs go through a rigorous federal approval process.[5]

EPA's oversight of a state Title V program does not end at the time that EPA grants full approval of the state program. Under Part 70, EPA retains the authority to issue a Notice of Deficiency ("NOD") at any time after it has granted approval to a program, if EPA determines that a state permitting authority "is not adequately administering or enforcing a part 70 program, or portion thereof."[6] When EPA publishes an NOD in the *Federal Register*, the state permitting authority has 90 days "to take significant action to assure adequate administration and enforcement of the program," under a threat of sanctions under the FCAA, withdrawal of program approval, or implementation of a federal Title V program by EPA under the federal Title V program codified in 40 C.F.R. Part 71.[7] The state has 18 months to correct a deficiency identified by EPA in an NOD in order to avoid the implementation of a federal Title V program by EPA.[8]

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[1] 42 U.S.C. §§ 7661-7661f [FCAA §§ 501-507].

[2] 30 T.A.C. § 122.10(13); 40 C.F.R. § 70.2 (definition of "major source").

[3] 30 T.A.C. § 122.10(2); 40 C.F.R. § 70.2 (definition of "applicable requirement").

[4] 30 T.A.C. § 122.145; 40 C.F.R. § 70.6(a)(3)(iii)(A)-(B) (deviation reporting); 30 T.A.C. § 122.146; 40 C.F.R. § 70.6(c)(5) (annual compliance certification).

[5] *See* 40 C.F.R. § 70.4 (state program approval).

[6] 40 C.F.R. § 70.10(b)(1).

[7] 40 C.F.R. § 70.10(b)(2).

[8] 40 C.F.R. § 70.10(b)(4).

In addition to making EPA responsible for the approval and oversight of state Title V programs, the FCAA and Part 70 give EPA the authority to review and potentially object to individual Title V permit actions, as described in greater detail below.

B. Texas Title V Program Approval History

The TCEQ implements a fully-approved Title V program.

The State of Texas first submitted an operating permit program to EPA for approval on November 15, 1993. EPA promulgated interim approval of the Texas program on June 25, 1996, and the program became effective on July 25, 1996.[9] When issuing the interim approval of the Texas program, EPA identified a series of deficiencies that the TCEQ had to correct to secure full approval of the Texas Title V program. The TCEQ corrected those deficiencies to EPA's satisfaction, and EPA granted full approval of the Texas Title V program effective November 30, 2001.[10] Notably, one change that TCEQ made in order to secure full approval of the Title V program was to revise the definition of "applicable requirement" to include the terms and conditions of all Chapter 116 preconstruction permits, including minor new source review ("NSR") permits.[11] In granting interim approval of the Texas program, EPA had taken the position that the Texas Title V program's exclusion of minor NSR as a Title V applicable requirement was inconsistent with Part 70; as a result, TCEQ revised the program to include all Chapter 116 permits as applicable requirements.

EPA's decision to grant full approval of the Texas program was challenged, and EPA successfully defended its approval of the Texas Title V program before the U.S. Court of Appeals for the Fifth Circuit.[12]

Shortly after granting full approval of the Texas Title V program, EPA in January 2002 issued an NOD for the Texas program, based on a finding that certain Texas program requirements did not meet the minimum federal requirements of the FCAA and Part 70.[13] The TCEQ adopted revisions to the Texas rules to resolve the issues identified in the NOD, and on July 9, 2003, EPA proposed to approve the Title V program revisions adopted by TCEQ.[14] EPA

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[9] 61 *Fed. Reg.* 32693 (June 25, 1996).

[10] 66 *Fed. Reg.* 63318 (Dec. 6, 2001). For a review of the program deficiencies identified by EPA at interim approval and how TCEQ addressed those deficiencies, see 66 *Fed. Reg.* 51897 (Oct. 11, 2001).

[11] For a review of the program deficiencies identified by EPA at interim approval and how TCEQ addressed those deficiencies, see 66 *Fed. Reg.* 51897 (Oct. 11, 2001).

[12] *See* Public Citizen v. EPA, 343 F.3d 449 (5th Cir. 2003). (denying petitions for review challenging full approval of the Texas Title V program).

[13] 67 *Fed. Reg.* 732 (Jan. 7, 2002).

[14] 68 *Fed. Reg.* 40871 (July 9, 2003).

subsequently promulgated a final rule approving the revisions that TCEQ had submitted and resolving all deficiencies identified in the January 2002 NOD.[15]

The Texas Title V program has maintained full approval status since 2001, and the January 2002 NOD is the only such notice issued by EPA for the Texas program. In fact, on February 21, 2002, EPA issued a letter to Public Citizen explaining why there were no other deficiencies in the Texas Title V program, following a formal *Federal Register* notice of an opportunity to submit comments to EPA on potential Title V program deficiencies.[16]

II. Title V Permit Issuance: EPA Review of Individual Texas Title V Permit Actions

A. EPA's Opportunities to Object to a Title V Permit

EPA's authority to object to a state-issued Title V permit is established Section 505(b) of the FCAA and Part 70, as well as in the federally-approved Texas Title V rules.[17] There are two circumstances in which EPA can object to a Title V permit. First, EPA can issue an objection to a state's proposed permit, during the "EPA review" period prior to permit issuance.[18] EPA also has the opportunity to object to a Title V permit post-issuance, if a member of the public petitions EPA regarding the permit and EPA agrees that the issued permit does not comply with the FCAA.[19] [20]

The review period that provides an opportunity for EPA objection to a proposed Title V permit applies to the initial issuance of a Title V permit, as well as to minor and significant Title V permit revisions, permit reopenings, and permit renewals.[21] EPA has 45 days to object to a proposed permit -- which is provided to EPA at the start of the public announcement or public comment period -- and can object to issuance of a permit only if the proposed permit "is not in compliance with the applicable requirements or the requirements of this chapter [30 T.A.C. Chapter 122, the federally approved Texas Title V rules]."[22] The Texas

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[15] 70 *Fed. Reg.* 16134 (March 30, 2005). For a review of the issues identified in the January 2002 Notice of Deficiency and how TCEQ addressed those deficiencies, see 70 *Fed. Reg.* at 16135-37.

[16] Letter from Carl E. Edlund, Director, Multimedia Planning and Permitting Division, EPA Region 6, to Kelly Haragan, Public Citizen (Feb. 21, 2002).

[17] *See* 42 U.S.C. § 7661d(b); 40 C.F.R. § 70.8(c); 30 T.A.C. § 122.350.

[18] 30 T.A.C. § 122.350(c).

[19] 30 T.A.C. § 122.350(c).

[20] Note that Part 70 also grants EPA authority to conduct "reopenings for cause" of individual Title V permits, based on a finding that cause exists to terminate, modify, or revoke and reissue a state-issued Title V permit. *See* 40 C.F.R. § 70.7(g). Part 70 identifies what can be considered "cause" to justify such an action, including a determination that "the permit must be revised or revoked to assure compliance with applicable requirements." *See* 40 C.F.R. § 70.7(f)(1)(iv). Part 70 establishes separate procedures for reopenings for cause. *See* 40 C.F.R. § 70.7(g)(1)-(5). EPA Region 6 has not initiated a reopening for cause in Texas; the discussion in this paper focuses on Title V permit objections, the mechanisms that EPA has employed in Texas to-date.

[21] 30 T.A.C. § 122.350(a).

[22] 30 T.A.C. § 133.350(c).

Title V rules state that, "if the [TCEQ] executive director fails, within 90 days of receipt of an objection, to revise the proposed permit and submit a revised permit, if necessary, in response to the objection, the EPA will issue or deny the permit in accordance with the requirements of the federal program promulgated under FCAA, Title V."[23]

The public petition process that can result in an EPA objection occurs after the issuance of a permit or permit revision. The public has an opportunity to petition EPA on the initial issuance of a Title V permit, significant Title V permit revisions (but not minor revisions), reopenings, and Title V permit renewals.[24] If EPA does not object to a state's proposed Title V permit, a member of the public can petition EPA, requesting that EPA object to the permit, within 60 days after the expiration of the EPA review period.[25] Because of the delay in responding to such petitions, EPA may act on public petitions and issue an objection to a Title V permit after it has been issued. Like EPA objections to proposed Title V permits, objections are limited to a permit that is not in compliance with the applicable requirements or the requirements of 30 T.A.C. Chapter 122.[26]

Also like EPA objections to proposed permits, the issuance of an objection after permit issuance triggers a 90-day clock for state action: "[i]f the [TCEQ] executive director has issued a permit before receipt of an EPA objection based on a public petition, the permit remains effective and the executive director shall have 90 days from the receipt of an EPA objection to resolve any objection and, if necessary, terminate or revise the permit."[27] If the TCEQ executive director fails to resolve the objection, "EPA will revise, terminate or revoke the permit, and the executive director may issue only a revised permit that satisfies EPA objection."[28]

B. The Effect of an EPA Title V Permit Objection

As stated above, the Texas and federal Title V rules direct EPA to "issue or deny" the permit if the TCEQ fails to timely respond to the objection. A Title V objection can also impact the permit holder's authority to operate changes at the site, even in cases where EPA does not move to issue or deny the permit.

Under the Texas Title V rules, the TCEQ Executive Director may only issue a permit if "the Executive Director resolves any objections received."[29] This provision does not affect previously issued Title V permits that receive an EPA objection in response to a public petition, and TCEQ rules expressly state that an EPA objection to a previously issued Title V

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[23] 30 T.A.C. § 122.350(e).

[24] 30 T.A.C. § 122.360(a).

[25] 30 T.A.C. § 122.360(c).

[26] 30 T.A.C. § 122.360(b).

[27] 30 T.A.C. § 122.360(h).

[28] 30 T.A.C. § 122.360(h)(2).

[29] 30 T.A.C. § 122.350(d)(3).

permit following the public petition process does not affect the effectiveness of the permit.[30] An EPA objection to a *proposed* permit or permit revision, however, can affect an applicant's authority to operate, based on the type of permit action held up by the objection:

- *Significant permit revisions.* Under the Texas Title V rules, the permit applicant cannot operate a "change" that requires a significant revision of the Title V permit before the permit is revised.[31] As a result, an EPA objection to a significant Title V permit revision can prevent the permit holder from operating a "change" until the TCEQ issues a revised permit that satisfies EPA's objection.

- *Minor permit revisions.* The Texas Title V rules allow permit holders to operate changes that trigger minor Title V permit revisions prior to the Title V permit revision being issued, provided the applicant submits the application for permit revision prior to operating the change and maintains compliance the applicable requirements governing the change.[32] As a result, an EPA objection to a minor Title V permit revision should not prevent the permit holder from operating any change that triggers a minor revision to the Title V permit.

- *Title V permit renewals.* Under the Texas rules, expiration of a Texas Title V permit will not terminate the permit holder's authority to operate, provided the permit holder submitted a timely and complete permit application.[33] As a result, an EPA objection to a Title V permit renewal should have no effect the permit holder's authority to operate, even if the permit's current expiration date passes before the TCEQ resolves the EPA objection.

Under the Texas Title V rules, an EPA Title V objection can prevent permit holders from making physical or operational changes that trigger a significant Title V permit revision.

III. EPA's Texas Title V Objections and the TCEQ Executive Director's Responses

EPA Administrator Jackson and EPA Region 6 have issued a combined 41 Texas Title V permit objections in 2009 and 2010. On May 29, 2009, EPA Administrator Jackson issued two Orders granting in part and denying in part two public petitions for objection to Texas Title V permits that had been filed when TCEQ originally issued the permits in 2007.[34] EPA Region 6 issued 39 objections to proposed Title V permit actions between October 30, 2009 and June 15, 2010.[35] While some of the issues identified in the Title V objections are permit-

[30] 30 T.A.C. § 122.360(h).

[31] 30 T.A.C. § 122.221(a).

[32] 30 T.A.C. § 122.217(a)(1)&(2).

[33] 30 T.A.C. § 122.241(g).

[34] EPA Administrator Jackson's Orders responding to the public petitions are posted on EPA Region 7's Title V petition database at the following address: http://www.epa.gov/region07/air/title5/petitiondb/petitiondb2007.htm.

[35] EPA Region 6 is posting its Texas Title V objection letters on its website at the following address: http://yosemite.epa.gov/r6/Apermit.nsf/AirP.

specific, the majority of the objections are "programmatic" in that EPA has made the same objection repeatedly, and the position taken by EPA in the objection applies equally to other Texas Title V permits that are not caught up in the Title V objection process.

The TCEQ Executive Director has responded in writing to 22 of the EPA Title V permit objections as of July 16, 2010.[36] Some of the TCEQ's response letters have been submitted timely to EPA Region 6, within 90 days of receipt of the EPA objection. For other objections, the TCEQ has filed a response with EPA, but the response letter was submitted to EPA more than 90 days after receipt of the objection. Just as EPA has filed similar (if not identical) objections to the same programmatic issues that appear throughout Texas permits, TCEQ has filed a number of identical responses to those objections.

The following tables briefly review the key cross-cutting objections that EPA has made to Texas Title V permits and the TCEQ Executive Director's responses to those objections. The objections can be classified into two broad categories: (1) "SIP gap" objections and (2) programmatic Title V objections.

A. SIP Gap Objections

Title V objections have become a front line in the SIP gap battle in Texas. EPA has now formally disapproved the TCEQ's longstanding proposed SIP revisions regarding the flexible permit program in 30 T.A.C., Chapter 116, Subchapter G and the Chapter 116 "qualified facility" flexibility rule revisions adopted by TCEQ in response to Senate Bill 1126. TCEQ is preparing rule packages aimed at addressing the issues that EPA identified in its proposed disapprovals of the flexible permit and qualified facility rules, but EPA did not wait for these TCEQ rule projects to be completed before taking final action on the proposed disapprovals.

EPA has filed repeated objections to Texas Title V permits that incorporate Chapter 116 flexible permits as applicable requirements and that authorize operations at a site that has made changes authorized by Senate Bill 1126/qualified facility flexibility.

[36] TCEQ is posting the Title V objection response letters on its website at the following address: http://www.tceq.state.tx.us/permitting/air/announcements/tv_announce_05_27_10.html.

EPA Objection	TCEQ Executive Director's Response
Incorporation of Flexible Permit The Title V permit incorporates by reference a flexible permit issued under 30 T.A.C. Chapter 116, Subchapter G. The flexible permit rules have not been approved as part of the Texas SIP. EPA must object to issuance because the terms and conditions of the incorporated flexible permit cannot be determined to be in compliance with the Texas SIP.	The Executive Director disagrees. The emissions authorized by the flexible permit meet the air permitting requirements of the federally approved provisions of the Texas SIP. Flexible permit review requirements are parallel to the SIP-approved Subchapter B permit review; no substantive differences in significant permit elements. Flexible permits do not allow circumvention of federal NSR permitting requirements. EPA's delay in acting on the flexible permit rules resulted in a long period of detrimental reliance on this permit mechanism by entities and TCEQ. All 30 T.A.C. Chapter 116 authorizations, including flexible permits, are Title V applicable requirements. They may not be included as "state-only" requirements.
Incorporation of Qualified Facility Change The Title V permit incorporates by reference a permit for which the permit holder submitted a Notification of Changes to Qualified Facilities. The qualified facility program has not been approved as part of the Texas SIP. EPA must object to issuance because the physical or operational changes made under the Qualified Facility rule cannot be determined to be in compliance with the Texas SIP.	The Executive Director disagrees. As a Chapter 116 authorization mechanism, qualified facility changes are Title V applicable requirements and shall be included in Texas Title V permits. The qualified facility program does not allow sources to utilize the qualified facility authorization mechanism to circumvent federal NSR permitting requirements. EPA's delay in acting on the qualified facility rules resulted in a long period of detrimental reliance on this permit mechanism by entities and TCEQ. EPA objections to individual permits issued under an EPA-approved operating permit program are not appropriate for concerns that relate to approved program elements.

B. Programmatic Title V Objections

In addition to the SIP gap issues, EPA has filed objections that relate to Title V permit terms that are common to many, if not all, Title V permits in Texas. Following is a brief review of those programmatic Title V objections and the TCEQ Executive Director's responses.

EPA Objection	TCEQ Response
Federal NSR Permit Incorporation-by-Reference A Title V permit's incorporation-by-reference of federal NSR requirements is improper. The Title V permit incorporates a federal NSR/ PSD permit by-reference and thus fails to include emission limits/standards as necessary to assure compliance with all applicable requirements.	The Executive Director disagrees; incorporation by reference of both major and minor NSR permits is acceptable and was fully approved by EPA. The Executive Director will revise the Title V permit to include a copy of the federal NSR permit, including its terms and conditions and emissions limitations, as an appendix to the Title V permit.
Annual Compliance Certification Provision The Title V permit's compliance certification Special Condition does not meet regulatory requirements, including the identification of methods or other means for determining compliance.	The Executive Director disagrees. Title V permit's compliance certification language is proper and requires compliance with 30 T.A.C. § 122.146, which allows the certification to include or reference the method used to determine compliance status. EPA's Title V Task Force endorsed the "short-form" compliance certification. The Executive Director proposes clarification of the permit special condition regarding compliance certification requirements.
Permit Shield for Grandfathered Facilities The Title V permit and the Statement of Basis fail to adequately explain the legal and factual basis for the determination of non-applicability for "grandfathered" emission units.	The Executive Director disagrees. The permit shield's "concise summary" of basis for non-applicability is proper; the prior determination of non-applicability is based on application information submitted by the applicant and certified by a responsible official.
Adequacy of NSR Permit Recordkeeping Recordkeeping requirements of incorporated NSR permits do not comply with Title V's 5-year recordkeeping requirement.	The Executive Director agrees that the 5-year recordkeeping requirement trumps any shorter, inconsistent recordkeeping requirements in incorporated NSR authorizations. The TCEQ requires 5-year recordkeeping for all Title V permits. The Executive Director will add clarifying language to permits that the 5-year recordkeeping requirement under Title V supersedes.

Identification of Vents subject to Chapter 111 The Title V permit fails to identify specific vents subject to the different visible emissions requirements of 30 T.A.C. Chapter 111.	Chapter 111 visible emission requirements are sitewide requirements; EPA has previously supported the practice of not listing individual emission units that only have sitewide requirements. The Executive Director is working with applicants to identify the specific vents and their applicable Chapter 111 requirements.

C. How will the Objections be Resolved?

A review of the above objection/response tables reveals that EPA and TCEQ do not see eye-to-eye on many of the key SIP gap and programmatic Title V objections. Nevertheless, the TCEQ Executive Director has repeatedly stated in its response letters that it hopes to reach an agreed resolution to the issues. For example, with respect to the incorporation of flexible permits, the Executive Director states:

> the ED believes that resolution of EPA concerns regarding flexible permits is a common objective for both TCEQ and the EPA. The concerns discussed below regarding the use of the Title V permitting process to challenge independent flexible permits on a case-by-case basis do not diminish the importance of reaching an expeditious resolution to the NSR flexible permit issue.[37]

Similarly, while the TCEQ Executive Director disagrees with EPA Region 6 regarding the incorporation by reference of federal NSR permits, the Executive Director "recognizes that respective agency staff are actively involved in continuing, extensive discussions on how to resolve this issue" and the objection response states that "[t]he ED will continue efforts with EPA on how to resolve IBR of major NSR on a boarder, programmatic basis."[38]

As of July 16, 2010, the author is aware of no formal resolution of the key programmatic Title V objections or SIP gap issues cited in the EPA Region 6 objection letters. How these issues are resolved will affect every Title V permit holder in Texas, particularly if those sites are affected by the SIP gap and also have facilities authorized by a flexible permit and/or have authorized changes under Senate Bill 1126 qualified facility flexibility.

IV. EPA's Assertion of Part 71 Permitting Authority Over Texas Sites

A. EPA Region 6's Part 71 Takeover Letters

On May 25, 2010, EPA Region 6 raised the stakes in the Texas Title V standoff. It did so by issuing a letter to Texas Title V permit holder Flint Hills Resources, L.P. ("FHR")

[37] *See, e.g.,* TCEQ Executive Director's Response to EPA Objection, Permit No. O1272 at 2 (June 24, 2010).

[38] *See, e.g.,* TCEQ Executive Director's Response to EPA Objection, Permit No. O1272 at 5-6, 7 (June 24, 2010).

asserting that, because TCEQ had failed to file a timely response to Region 6's objection letter regarding a minor revision to FHR's Corpus Christi East Refinery's Title V permit, EPA Region 6 "is required to issue or deny a Title V Operating Permit."[39] The May 25 letter asserts that EPA is taking over as Title V permitting authority for the site.

EPA Region 6 instructs FHR in the May 25 letter to submit an application for a Part 71 permit by September 15, 2010 "if you wish to continue operations."[40] The letter adds,

> If you fail to submit a timely and complete application, you will be considered operating without a valid Title V permit, per 40 CFR § 71.5(b), and you could be subject to enforcement action. In addition, in accordance with 40 CFR § 71.5(a)(2) and 71.7(b), if EPA determines that your permit application does not contain the information requested in this letter and you fail to promptly submit any relevant facts or corrected information by a date specified in the request, your application will be declared incomplete and your permit will not be administratively continued resulting in the loss of your permit application shield. The EPA will not consider the application complete until we are assured that we have all the information needed to prepare a draft permit. Future enforcement actions could include administrative compliance orders, administrative penalty orders, and/or referral to the United States Department of Justice for judicial action with monetary fines. This will be the only notice you will receive from the Agency advising you of the need to apply for your part 71 permit.[41]

The May 25 letter to FHR requires the submittal of "very detailed" information that "will allow EPA to identify each federally-enforceable and applicable requirement that pertains to each emission point covered by your state issued flexible permit and any other underlying authorizations issued by TCEQ as identified in your New Source Review Authorizations Reference Table."[42] Included in this required application information is a table tracking historical changes at the site, along with a table designed to restate in tabular form the federal NSR requirements applicable to individual emission units at the site.[43] The letter further states that FHR will be required to pay Part 71 emission fees upon issuance of the Part 71 Title V permit.[44]

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[39] Letter from Carl E. Edlund, Director, Multimedia Planning and Permitting Division, EPA Region 6, to Richard Harris, Flint Hills Resources, L.P., *Notification to Submit 40 CFR Part 71 Air Permit Application to EPA* (May 25, 2010).

[40] *Id.* at 1.

[41] *Id.* at 2-3.

[42] *Id.* at 2.

[43] *Id.* at Enclosures 4 & 5.

[44] *Id.* at 3.

A few weeks after sending the letter to FHR, on June 15, 2010, EPA Region 6 sent two more Part 71 takeover letters to Texas Title V sites that, similar to FHR, were subject to an EPA objection to which TCEQ had not made a timely response.[45] The Part 71 takeover letters sent on June 15, 2010 to Chevron Phillips Chemical Company LP and the City of Garland Power and Light contain the same language that conditions the site's continued right to operate on submittal of a Part 71 application in accordance with EPA's direction.

B. Environmental Appeals Board Challenge

FHR filed a petition for review with EPA's Environmental Appeals Board ("EAB") in response to the May 25, 2010 Part 71 takeover letter. The petition states that EPA was without authority to effectively revoke its existing Texas Title V permit and demand a Part 71 application because EPA's review (and opportunity for objection) was limited to the minor revision of the permit before EPA.[46] The petition further argues that EPA's objections were "improper because they either misstate the applicable law or application of the law to the facts presented here."[47]

A critical question that the FHR petition for review presents is whether EPA's Part 71 letters are final permit decisions. Shortly after receiving FHR's petition for review, the EAB ordered EPA Region 6 to file a response, "focused solely on the issue of whether the Board has jurisdiction to consider this matter," and in particular whether or not Flint Hills is correct in asserting that EPA's letter represented a final permit decision subject to Board review.[48] EPA's response is due on July 21, 2010, and is not available as of this writing.

V. So Many Questions, So Few Answers

Between the SIP gap dispute, EPA's recent SIP disapproval of the flexible permit and qualified facility rules, EPA's Title V permit objections and the TCEQ Executive Director's responses, EPA's Part 71 takeover letters, and at least one administrative challenge to EPA's actions under Part 71, the Texas NSR and Title V programs are in an extreme state of flux. Unfortunately for the regulated community in Texas, there are currently more questions than answers. Following are several of the questions that the author has asked (or has been asked) relating to the current state of affairs in Texas air permits.

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[45] Letter from Carl E. Edlund, Director, Multimedia Planning and Permitting Division, EPA Region 6, to Van Long, Chevron Phillips Chemical Company LP, *Notification to Submit 40 CFR Part 71 Air Permit Application to EPA* (June 15, 2010); Letter from Carl E. Edlund, Director, Multimedia Planning and Permitting Division, EPA Region 6, to Aubrey Harris, City of Garland Power and Light, *Notification to Submit 40 CFR Part 71 Air Permit Application to EPA* (June 15, 2010).

[46] *In re: Flint Hills Resources, LP, Permit No. O1445, CAA Appeal No. 10-03, Petition for Review* (filed June 24, 2010).

[47] *Id.*

[48] EAB, *In re: Flint Hills Resources, LP, Permit No. O1445, CAA Appeal No. 10-03, Order Requiring Response on Jurisdiction.*

- ***Why now? Why did these long-settled elements of the Texas air program suddenly become objectionable in 2009?***

  A good question. As the TCEQ Executive Director has pointed out in addressing several of the Title V objections, the programmatic Title V issues that EPA has recently identified have long been part of Texas Title V permits. Moreover, with respect to the SIP gap, the EPA-approved definition of "applicable requirement" in the Texas Title V rules explicitly makes all Texas Chapter 116 preconstruction permits, including flexible permits and permit requirements changed through qualified facility flexibility, federally enforceable Title V applicable requirements.

  The same permits with the same permit conditions were subject to EPA review at initial issuance and for prior revisions, and EPA did not object. In fact, EPA specifically endorsed some elements of the Texas program that it now finds objectionable. Nothing in the Texas or federal Title V program changed in the interim.

- ***Why are individual permit objections the mechanism by which EPA is seeking programmatic change?***

  As FHR correctly asserts in its EAB petition for review, EPA is using the EPA review afforded by Part 70 and Chapter 122 of the Texas rules to object to permit elements that are unaffected and/or unrelated to the permit action before it.

  Moreover, a formal Notice of Deficiency, rather than individual permit objections, is the mechanism envisioned by Part 70 to address such programmatic Title V issues, where EPA finds that a state is not adequately implementing or enforcing the Title V program. The use of individual objection letters unnecessarily drags individual permit holders into a state/federal dispute and, if EPA is correct in its assertions made in the Part 71 takeover letters, wrongly imperils the permit holders' valid permits (and their right to continue lawful operation).

- ***Why is the Title V program suddenly at the front lines of the SIP gap dispute in Texas? The SIP gap is an NSR issue!***

  EPA has seized upon the Title V objection as a way to bring its concerns about the flexible permit and qualified facility flexibility programs to the fore.

  As the TCEQ Executive Director states in response to the SIP gap Title V objections, the flexible permit and qualified facility flexibility rules are consistent with the approved Texas SIP and have been administered in a manner that prevents circumvention of federal NSR requirements. Moreover, it is the SIP process, and not objections to individual Title V permit actions, that should be used to address the SIP gap, particularly where, as with flexible permits and qualified facility flexibility, EPA delayed action for many years and the SIP gap

NSR mechanisms were widely used and subsequently incorporated into Title V permits without EPA objection.

EPA's concerns regarding the lack of federal enforceability of flexible permit requirements is unfounded. As noted above, the Texas Title V rules explicitly make Chapter 116 preconstruction permits (including flexible permits) federally enforceable Title V applicable requirements. In that regard, doesn't the Texas Title V program actually *address* the federal enforceability concerns associated with the SIP gap?

- ***Why has EPA asserted authority to issue Title V permits for Texas sites under Part 71? Is EPA correctly characterizing the threat to the Part 71 letter recipients' authority to continue operating?***

  The Texas and federal Title V rules give EPA Part 71 takeover authority. In its Part 71 takeover letters, however, EPA appears to take the position that it has the power to require Texas Title V permit holders to apply for a new, federal Title V permit under Part 71 without making an issuance-or-denial decision on the existing Part 70 permit. EPA also appears to assert that a final decision on the existing Part 70 permit is not necessary before the permit holder's right to operate under that permit is extinguished.

  EPA's position is contrary to elements of the EPA-approved Texas Title V program, including the rule providing that a permit holder may continue operating under the application shield for a Part 70 permit renewal until final action is taken on that permit renewal application.[49] EPA's Part 71 letters also appear to circumvent the Part 71 procedures established for formal denial of a state-issued Title V permit, and set application deadlines for the recipients that appear inconsistent with the protections provided Title V permit holders by Part 71.

  The EAB's *Order Requiring Response on Jurisdiction* issued in response to FHR's petition for review requires an EPA response, and EAB's determination should ultimately resolve some of the issues surrounding the Part 71 path taken by EPA Region 6.

- ***What is going to happen to me? And to my Title V permit?***

  These, of course, are the most pressing questions, both for those currently caught up in the web of Title V objections, and for those members of the regulated community who are bystanders. How will Texas Title V permits change as a result of the objections? Will one of my upcoming permit actions draw an objection? Do we have any upcoming physical or operational changes for which Title V permit issuance (and EPA non-objection) will be required in order to start operating the change?

[49] *See* 30 T.A.C. § 122.241(g).

> The current absence of any resolution to the programmatic Title V issues and the SIP gap objections inserts uncertainty to permits and to future physical or operational changes that will require Title V permit actions. Moreover, the absence of a clear path forward on the objection issues complicates any attempt to *prevent* an objection through proactive changes to a site's permit.

* * *

Given the great uncertainty facing Texas Title V permit holders associated with both the SIP gap and the Title V program, Texas companies face serious concerns on the air permitting front. The coming year promises to bring significant developments for the regulated community in Texas.

Bob Sussman currently serves as Senior Policy Counsel to Administrator Lisa P. Jackson at the U.S. Environmental Protection Agency. In this role, Bob advises the Administrator, Deputy Administrator and other Senior Agency Officials on high-profile policy issues.

Bob's current position heralds a welcome return to EPA, where he previously served as Deputy Administrator under Carl Browner in the Clinton Administration. Bob also served as the co-Chair of the Presidential Transition Team at EPA following the election of President Obama.

In addition to his federal service, Bob held the position of partner in the Washington, D.C. offices of law firms Latham and Watkins and Covington and Burling as well as Senior Fellow at the Center for American Progress (CAP), where he published several articles on energy and climate change.

Bob is a 1973 graduate of Yale Law School and a 1969 graduate of Yale College. He clerked for U.S. Circuit Court Judge Walter Stapleton.

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ENVIRONMENTAL LAW EXPERIENCE

Ms. Baker is a founding partner of the Houston litigation and environmental regulatory law firm of Connelly · Baker · Wotring LLP, where she serves on the Firm's Management Committee. Ms. Baker has practiced environmental law for more than 24 years and obtained her law degree from the Georgetown University Law Center, where she received the Magoichi Kato Scholarship Award for Academic Excellence for Japanese American students. She obtained a Bachelor of Science degree, Summa Cum Laude, from the University of Maryland.

Ms. Baker's practice encompasses the full spectrum of environmental issues, with an emphasis on the handling of difficult and complex multi-party environmental cases, Superfund, environmental regulatory counseling and representation in enforcement, permitting, catastrophic release response, compliance and environmental support in corporate/real estate due diligence and transactional matters. She is an author and editor of the First and Second Editions of the *Texas Environmental Law Handbook*, published in January 1989 and October 1990 and is a co-author of two other books on environmental law. Ms. Baker has also authored and published more than 50 articles on environmental law, has lectured extensively on environmental legal issues, and has testified in a variety of cases as an expert witness on environmental law in the United States and Canada.

She is active in bar, law school and community activities promoting issues concerning the environment, minority advancement and gender equality issues, among others. Ms. Baker was featured on the cover of *Diversity & The Bar* magazine, a publication of the Minority Corporate Counsel Association, in connection with her work in the area of diversity. She is the 2008 recipient of the Ma'at Justice Award, awarded annually by the State Bar of Texas Women and the Law Section to an individual who has actively addressed the needs and issues of women in the legal profession and the community. Ms. Baker was also the 2006 award winner of the Texas Bar Foundation's Dan Rugeley Price Award presented to an outstanding practitioner dedicated to the bar and public. She has served as an Adjunct Professor of Environmental Law at both the University of Houston Law Center and the South Texas College of Law, and was co-founder and past Chair of the Houston Bar Association's Environmental Law Section. She was also a founder and Chair of the American Bar Association's national Environmental Law Group, supervising 10 environmental committees integrating issues of environmental law with real estate, landlord and tenant issues, due diligence, and merger and acquisition transactions. Ms. Baker was the 2008 Chair of the Houston Bar Foundation, the HBA's 501(c)(3) charitable foundation, and other bar appointments have included serving on the Board of Directors of the Asian American Bar Association, as Vice Chair of the State Bar of Texas Standing Committee on Women in the Profession, and Co-Chair of the Houston Bar Association's Gender Fairness Committee, among others. Prior to forming the Connelly · Baker Firm, Ms. Baker headed the Environmental Law Practice group for the 120-lawyer firm of Mayor, Day, Caldwell & Keeton, L.L.P. for over a decade and also practiced environmental law in the D.C. and Houston offices of Fulbright & Jaworski, L.L.P. She is admitted to practice in both the District of Columbia and Texas.

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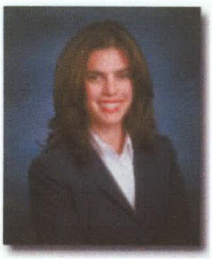
Pinar Dogru



Biography

Pinar Dogru counsels clients on air and water quality permitting, authorizations for pollution control projects, state and federal reporting requirements, and maintaining compliance with local, state and federal environmental regulations. She represents clients on contested permits before the State Office of Administrative Hearings and also before the Texas Commission on Environmental Quality. In addition to permitting and regulatory compliance, Ms. Dogru has experience conducting environmental audits under the Texas Environmental Health & Safety Audit. In the Central Texas region, Ms. Dogru has assisted clients with the necessary authorizations for groundwater usage and surface water runoff in sensitive aquifer regions. She also has experience with water quality permitting for aquaculture facilities and provides counsel to clients seeking wetlands and water rights certifications.

Prior to joining Jackson Walker, Ms. Dogru worked as an environmental attorney with the Texas Commission on Environmental Quality (TCEQ) in the air quality, water quality, utilities and water rights sections. She gained expertise in environmental matters spanning air quality permitting water quality permitting, water pollution abatement plans over the Edwards Aquifer, water and sewer utility matters, district matters, as well as water rights permitting. She also served as lead counsel for several rulemaking matters concerning air quality, environmental management systems, and groundwater availability. Prior to the TCEQ, Ms. Dogru worked on patent litigation matters for a firm in Washington, D.C.

Publications & Speaking Engagements

Ms. Dogru has presented papers on Environmental Law and Toxicology issues at the following:

Society for Risk Analysis: Perchlorate Contamination of Federal Facilities, Palm Springs, California (2004)

Society of Environmental Toxicology and Chemistry: Perchlorate Leakage in Bosque Watershed, Austin, Texas (2003)

Environmental Certification meeting, Texas Tech Law School: Environmental Modeling and Legal Issues on Perchlorate-Contaminated Federal Facilities, Lubbock, Texas (2004)

New Air Emission Regulations for Oil & Gas Facilities
CleanTX Analysis on Environmental Regulations
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Ms. Dogru is a member of the American Bar Association, where she is co-editor of the Water Quality and Wetlands Committee newsletter. She was appointed as Vice-Chair for the 2009 ABA Water Quality and Wetlands Year in Review. Ms. Dogru is a member of the State Bar of Texas (Environmental and Natural Resources Section) and a member of the Austin Bar Association (Environmental, Natural Resources, and Water Section), where she serves as Chair of the Publications Committee.

Ms. Dogru also serves as Program Chair for the Air & Waste Management Association Central Texas Chapter and is a member of the Hill Country Conservancy Emerging Professionals in Conservation.

Community Involvement

Ms. Dogru regularly assists with Meals on Wheels deliveries and represents pro bono clients with administrative hearings.

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J.D., Texas Tech University School of Law, 2003
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DIRECT REUSE OF WASTEWATER:
Examination of an Alternative Water Supply

PINAR DOGRU

TABLE OF CONTENTS

I. Introduction 1
II. The State of Water in Texas 1
A. The Texas State Water Plan 1
B. Projected Water Needs 2
C. Recommended Water Strategies 3
1. Conservation 3
2. Surface Water 3
3. Groundwater 3
4. Desalination 4
5. Reuse 4
III. Reuse Water 4
A. Treated Effluent 4
B. Regulation of Direct Reuse in Texas 5
C. Direct Reuse Applications in Texas 7
D. Direct Reuse Outside of Texas 8
IV. The Future of Reuse Water 9
A. Risk vs. Perceived Risk 9
B. 82nd Legislative Session 9
V. Conclusion 10

I. INTRODUCTION[1]

Texas' population is the second largest in the U.S. next to California, and is expected to surpass a population of 25 million in 2010.[2] As people move to Texas and seek more affordable housing outside of the city limits, there is a greater need to provide a source of drinking water and to treat and dispose of wastewater in the suburban areas.

The water source typically comes from surface water (e.g., reservoir) or a groundwater well that is either located near the development or is brought in by pipes or waterways. Surface water, however, is not readily available as it is typically already appropriated under a water right and even if available for purchase, the costs can be prohibitive. Groundwater has its own costs associated to it. The water must be of such a quality for consumptive use and if the water quality is brackish, the water must undergo costly treatment prior to use. Permit fees are also associated with the drilling of a well, and in times of drought, the permittee risks losing access to the groundwater, particularly if located within a Groundwater Conservation District. In times of drought, the Groundwater Conservation District may begin placing a priority on drinking water needs. The consumptive needs of a population are a priority, but with a limited supply of water, those entities that are not utilizing the groundwater for drinking purposes are left without a viable source of water. This could lead to a temporary or permanent cessation in business. For this reason, it is critical to explore alternative water supplies for non-consumptive purposes, particularly in times of drought.

II. THE STATE OF WATER IN TEXAS

A. *The Texas State Water Plan*

Texas' growth requires responsible management of available water resources, which is the Texas Water Development Board's (TWDB) primary role. The TWDB's role has expanded over the years, beginning with the passage of Senate Bills 1 (75th Legislature), 2 (76th Legislature), and 3 (80th Legislature).[3] As part of the mandate in Senate Bill 1, the TWDB worked with the Texas Parks and Wildlife Department, and the Texas Natural Resource Conservation Commission (now the Texas Commission on Environmental Quality or TCEQ) to adopt the 1997 State Water Plan. This was the TWDB's coordinated attempt to examine the status of water in the state of Texas and assess future water needs. Since 1997, sixteen (16) regions across Texas have analyzed and documented their specific water needs and these recommendations have been incorporated into the 2002 State Water Plan, which was revised and published in 2007.[4]

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[1] The views expressed in this paper represent the perspective of the author as related to her practice area and are not the views of Jackson Walker L.L.P. Pinar Dogru is an associate in the Environmental Practice Group of Jackson Walker L.L.P. Sebastian Abogabir assisted in the research of this article and is a visiting attorney from Santiago, Chile, where he was an associate of the Energy and Natural Resources Group of the firm, Guerrero, Olivos, Novoa y Errazuriz.

[2] H.R. Rep. No. 81-10, January 21, 2010, *available at* http://www.hro.house.state.tx.us/focus/Census81-10.pdf.

[3] Texas Water Development Board, Strategic Plan 2011-2015, *available at* http://www.twdb.state.tx.us/publications/reports/Administrative%20Reports/StratPlan2011_2015.pdf.

[4] *Id.*

Since March 2008, the TWDB committed over $918 million to implement 35 recommended strategies in the State Water Plan. Over $165 million has been committed to finance development of new reservoirs, raw water conveyance, surface water treatment plants, and wetland reuse. More than $753 million has been committed to construct new surface water treatment plants, new well fields, raw water intakes, transmission lines and recycled water pipelines. The funding available to the TWDB is intended to help implement the planning, design and construction of water plan strategies that have not had the appropriate funding for several years. [5]

The State Water Plan is not a fixed plan; it is constantly undergoing review and revisions. There will be an updated a revised Plan by January 5, 2012. Texas has another year and a half to re-evaluate the water consumption needs before a revised State Water Plan is due to the Governor, Lieutenant Governor, Speaker of the Texas House of Representatives, and the House and Senate Natural Resource Committees. [6]

B. *Projected Water Needs*

Texas is expected to more than double in the coming years, growing to approximately 46 million by 2060.[7] Somewhat surprisingly, even though the population is expected to double, the State Water Plan projects that the water needs of the State will only increase by 27 percent (%).[8] The reduced water consumption need is attributed to the expected decline of water needed for agricultural irrigation coupled with the increased conservation within the cities.

While this sounds promising, one must keep in mind that the existing water supplies will not stay constant. The State Water Plan projects an 18% decline of available water supply by 2060. The decline in available water is attributed to the sedimentation of existing reservoirs and depletion of groundwater supply.[9] Also, factor in the recent drought in the past few years, which rivaled the record drought of the 1950s. The threat of a drought with the reduced availability of traditional sources of water, only furthers the case for alternative sources of water.

According to the State Water Plan, Texas will need to secure an additional 8.8 million acre-feet of water by 2060 to accommodate Texas' growing population.[10] This 8.8 million acre-feet will need to come from a variety of water management strategies, including conservation, management of surface and groundwater, reuse of existing water, and desalination to name a few. [11]

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[5] *Id.*

[6] *Id.*

[7] Texas Water Development Board, 2007 Texas State Water Plan, Volume II, Chapter 1, *available at* http://www.twdb.state.tx.us/wrpi/swp/swp.asp.

[8] The water demand was approximately 17 million acre-feet of water in 2000 and is expected to increase to 21.7 million acre-feet in 2060 according to the 2007 Texas State Water Plan.

[9] *Id.*

[10] *Id*, at Volume II, Chapter 1.

[11] *Id*, at Volume II, Chapter 10.

C. *Recommended Water Strategies*

1. *Conservation*

One cost-effective management strategy is to encourage conservation of the existing water supplies, either through active conservation measures initiated by businesses and consumers, or by passive conservation, requiring installation of more efficient plumbing fixtures. The TWDB estimates that just passive conservation alone will reduce municipal water demand by at least 6.6% by 2060.[12]

2. *Surface Water*

Texas has approximately 191,000 miles of streams and rivers, 15 major river basins and eight coastal basins at its disposal and for potential surface water use.[13] Out of the 196 major reservoirs in Texas, 175 of these are used for water supply, irrigation, or industrial water use.[14] Yet these existing reservoirs will lose available water to sedimentation and evaporation.

One strategy is to consider reallocating water, purchasing new water, or changing the operating framework of the reservoirs in a manner that optimizes available water. The management of existing reservoirs is projected to produce an additional 4.4 million acre-feet of water in 2060. The State Water Plan also recommends creation of 15 new major reservoirs that would generate approximately 1.1 million acre-feet per year by 2060 accounting for about 12 % of the water supply.[15]

3. *Groundwater*

Texas has approximately 9 major and 21 minor aquifers providing approximately 59% of the water within the state.[16] This means that almost 25 million Texans rely on groundwater for more than half of their water supply source. The groundwater supply within Texas is expected to decrease by 32% by 2060, primarily due to depletion of the Ogallala Aquifer and mandatory reductions for the Gulf Coast Aquifer to prevent land surface subsidence.[17]

To protect existing groundwater supplies, the State Water Plan recommends a series of groundwater management strategies, namely the: (i) installation of new groundwater wells; (ii) increased pumping from existing wells; (iii) installation of supplemental wells; (iv) temporary over drafting of aquifers during drought conditions to supplement water supplies; (v) expansion of treatment plants to make groundwater supplies meet water quality standards; and (vi)

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[12] *Id.*

[13] *Id,* at Volume II, Chapter 6.

[14] *Id.*

[15] *Id.* at Volume II, Chapter 10.

[16] *Id,* at Volume II, Chapter 7.

[17] *Id.*

reallocation and transfer of groundwater supplies from areas where projections indicate that surplus groundwater will exist to areas with water needs.[18]

Water management strategies concerning groundwater are expected to account for about 9% of the total projected water volume.[19]

4. *Desalination*

Desalination involves the removal of salts from brackish groundwater or marine water sources to treat the water to a quality safe for consumption. The desalination projects are expected to provide approximately 313,000 acre-feet per year of new water, by desalinating seawater and brackish groundwater. Water that has undergone desalination will make up about 3 % of new water supplies for the water management strategies needed in 2060.[20]

5. *Reuse*

Reuse water (or reclaimed water) typically is generated from wastewater treatment plants and re-introduced into the environment for a beneficial use. It is estimated that the amount of water available from reuse water is approximately 360,000 acre-feet per year. The TWDB estimates that the recommended water reuse strategies will generate approximately 1.3 million acre-feet in 2060, accounting for about 14% of new water supplies.[21] The fact that reuse water is expected to make up 14% of new water supplies is significant, considering that this percentage is higher than those for surface water, groundwater, or desalination for example. In other words, when looking at Texas' water management plans and new potential sources of water, reused wastewater is intended to make up a relatively significant portion of the available water source.

III. REUSE WATER

The recent drought and growing water demand in Texas has prompted considerable discussion about alternative sources of water, particularly for those applications not requiring human consumption or contact. Alternative water sources include: (1) treated and untreated wastewater from wastewater treatment plants; (2) stormwater runoff, collected from rainfall and retained in detention ponds; (3) domestic gray water, from household uses such as dishwashing and laundry; and (4) industrial wastewater, from industrial uses such as cooling water or agricultural applications. This discussion will focus on the application of treated wastewater, or effluent. ruse or reclaimed water is the application of treated effluent towards a beneficial use.

A. *Treated Effluent*

At a wastewater treatment plant, the wastewater will typically undergo biological, physical, and chemical treatment before it is reintroduced into the environment. This is important because the

[18] *Id.*

[19] *Id.* at Volume II, Chapter 10.

[20] *Id.*

[21] *Id.*

plant must remove biodegradable organic matter, plant nutrients, pathogens and other matters before the water can be safely reintroduced into the environment.

Once treated, the effluent is either directly discharged to a nearby waterway or applied on land at the treatment plant site. However, some treatment plants pipe and sell the effluent to entities several miles away as an alternative water supply. These receiving entities then either directly land apply the treated effluent to their operations ("direct reuse") or after introducing the treated water into a waterway, later collect the commingled wastewater downstream ("indirect reuse"). Indirect reuse involves commingled and diluted wastewater as well as a myriad of water rights issues, whereas direct reuse entails the direct application of the treated wastewater and raises groundwater impact issues. This discussion will focus on the various direct reuse applications, regulatory authority governing these applications, and the potential risks or perceived risks of applying treated effluent.

B. *Regulation of Direct Reuse in Texas*

The Texas Commission on Environmental Quality (TCEQ) has devoted a chapter entirely to the regulation of direct reuse of treated effluent, titled "Use of Reclaimed Water", or referred to as the "Chapter 210 rules."[22]

These regulations have been in place since 1997, signaling that the application of treated effluent on sites other than the wastewater treatment plant has been an approved and regulated alternative water source for well over a decade in Texas. The regulations set the water quality requirements for the reclaimed water producers, providers and users; the specific uses allowed; reporting requirements; applications for alternative reclaimed water systems; and the use of industrial reclaimed water and gray water systems.[23]

When TCEQ (then the Texas Natural Resource Conservation Commission) adopted the reclaimed water rules, the stated purpose was to "encourage and facilitate the reuse of treated domestic wastewater effluent from municipal wastewater treatment facilities for beneficial purposes; assist in the conservation of surface and groundwater; ensure the protection of public health; protect the quality of surface and groundwater; and help ensure an adequate supply of water for present and future needs."[24] It was clear that the TCEQ viewed the beneficial application of treated wastewater as a viable alternative water source when utilized within regulated parameters.

To encourage use of reclaimed water, the TCEQ created a fairly streamlined application process. Applications for reclaimed water use are reviewed and approved by the TCEQ Executive Director, which typically means a shorter review and approval period. Also, while the producer or provider must seek a 210 authorization, the user typically is not required to seek a separate

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22 Title 30 of the Texas Administrative Code (30 TAC), Chapter 210. Reclaimed water is defined as "Domestic or municipal wastewater which has been treated to a quality suitable for a beneficial use, pursuant to the provisions of this chapter and other applicable rules and permits". 30 TAC Section 210.3 (24).

23 30 TAC Chapter 210.

24 Use of Reclaimed Water, 22 Tex. Reg. 1103 (January 31, 1997).

authorization.[25] The onus is placed on the reclaimed water producer or provider to ensure that the reclaimed water meets the water quality standards required for its intended use.[26]

Applicants for a 210 authorization are required to identify the producer, provider, and user(s) of the reclaimed water.[27] The applicant must also identify the type of reclaimed water to be provided, differentiating between Type I and Type II effluent. Type I effluent is treated to a higher standard since it is the type of effluent where human contact is likely, unlike Type II effluent where contact with humans is not likely.[28] The applicant must also list the intended uses of the reclaimed water, whether on-site or offsite.[29]

Since reclaimed water is also stored at the site until utilized, there are also liner requirements for storage ponds depending on the location of the facility and whether it is situated above sensitive aquifer regions.[30] The additional storage liner requirements are in place to prevent any percolation of treated effluent to the groundwater, particularly in those sensitive regions where the geology is more porous and allows for a quicker infiltration rate, such as in the Edwards Aquifer region.

Upon the TCEQ Executive Director's approval of the reclaimed water application, the applicant is held to a series of notifications, recordkeeping, and reporting requirements. This is in place to ensure that the applicant maintains the level of effluent quality required for its intended use and that the effluent is correctly and safely utilized.[31] The TCEQ requires that the reclaimed water provider notify the TCEQ of the intended use (e.g., golf course irrigation), provide a water supply contract, and operation and maintenance plan.[32] If the intended use will be over the Edwards Aquifer region, the applicant must also get the Executive Director's approval prior to construction of the facilities.[33] The ponds must contain the treated effluent and any overflow is forbidden unless the discharge is already permitted or the overflow is purely due to excess rainfall.[34]

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[25] 30 TAC Section 210.5. Note that the TCEQ can require separate authorizations for reclaimed water users if "if the reclaimed water use poses potential or actual adverse impacts upon human health, soil and ground water resources, or aquatic life."

[26] TCEQ Application to Use Domestic Reclaimed Water, *available at* http://www.tceq.state.tx.us/assets/public/permitting/waterquality/forms/20427.pdf.

[27] *Id.*

[28] 30 TAC Section 210.3 (31), (32).

[29] TCEQ Application to Use Domestic Reclaimed Water. TCEQ specifies the types of acceptable reclaimed water use in 30 TAC Section 210.32, differentiating between Type I and Type II effluent uses.

[30] 30 TAC Section 210.23. "All initial and subsequent holding ponds containing Type I and Type II effluent, located within the recharge zone of the Edwards Aquifer, as defined in Chapter 213 of this title (relating to Edwards Aquifer), and all initial holding ponds containing Type II effluent, located in a vulnerable area as defined by a rating of 110 or greater on the statewide "Ground-Water Pollution Potential--General, Municipal, and Industrial Sources" (DRASTIC) map...shall conform to the following requirements..."

[31] The TCEQ regulations include set water quality criteria for reclaimed water in 30 TAC Section 210.33.

[32] 30 TAC 210.4.

[33] *Id.*

[34] 30 TAC 210.22.

Beyond storage, contracts, use, and water quality requirements, the TCEQ 210 rules also govern the land application of the reclaimed water. For example, the rules allow for irrigation of food crops, but require that the crops are processed (i.e. skinned or cooked) before consumption.[35] The reuse rules also require that irrigation of effluent be taken up by the vegetation, meaning that the reclaimed water cannot pond on the land. If the vegetation appears stressed or contaminated by excess salts in the effluent, the TCEQ prohibits continued irrigation of the effluent.[36] The effluent also cannot be stored or utilized if it does not meet specific water quality criteria in the reuse regulations. Failure to abide by TCEQ's reuse rules can result in enforcement for the provider, producer and even user, if applicable.[37]

C. *Direct Reuse Applications in Texas*

Several businesses and municipalities have taken advantage of the application process for reclaimed water use and have saved considerable amounts of drinking water by relying on this alternate water source. In Austin alone, several golf courses, the Mueller neighborhood, and the Austin Energy's Sand Hill Energy Center collectively use 1.9 billion gallons of reclaimed water on an annual basis. The City of Austin is now considering expanding its use of reclaimed water and recently has committed to expending $17.5 million on infrastructure to send reclaimed water to the University of Texas. This reclaimed water will be used for industrial cooling water and irrigation on the University of Texas campus in place of the current use of drinking water for these applications. The City of Austin anticipates that the substitution of drinking water with the reclaimed water will result in a conservation of over 10% of the drinking water in Austin by 2034.[38]

The City of San Antonio also utilizes reclaimed water, but to recharge a surface water way commonly known as the Riverwalk[39] and the City of San Marcos is utilizing reclaimed water as an irrigation source for construction projects.[40]

These examples demonstrate the use of reclaimed water for irrigation, industrial use, construction activities, and even to supplement surface water. El Paso has taken the reclaimed water use a step further and directly injects the treated effluent into their aquifer.

El Paso has an impressive reclaimed water system, making full use of reuse water throughout the city for irrigation of golf courses, schools, nurseries, construction projects, street sweeping, landscapes, industrial cooling towers and processes, and for fire protection.[41] El Paso also directly injects the reclaimed water into the aquifer that the city relies on for drinking water.

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[35] 30 TAC 210.24.

[36] *Id.*

[37] 30 TAC Section 210.9.

[38] *City Building $17.5 Million Line For 'Reclaimed Water' to UT*, Austin-American Statesman, December 29, 2009 *available at* http://www.statesman.com/news/texas/city-building-17-5-million-line-for-reclaimed-154994.html.

[39] City of Austin, Water Reclamation Program, *available at* http://www.ci.austin.tx.us/wri/reusefaq.htm.

[40] *City Uses Reclaimed Water for Irrigation*, San Marcos Local News, July 19, 2009, *available at* http://www.newstreamz.com/2009/07/19/city-uses-reclaimed-water-for-irrigation/.

[41] El Paso Water Utilities, Reclaimed Water, *available at* http://www.epwu.org/reclaimed_water/rwater.html.

Reclaimed water is directed to El Paso's Fred Hervey Water Reclamation Plant and undergoes an additional level of treatment (tertiary), which results in water of a drinking quality level. This tertiary-treated reclaimed water is then injected into the aquifer underneath El Paso, the Hueco Bolson Aquifer. In 2004 alone, El Paso injected approximately 577 million gallons of reclaimed water into the aquifer. The re-introduction of wastewater into an aquifer is not a wide practice within Texas and could be viewed with hesitation as a potential source of contamination. However, El Paso has successfully been implementing this replenishment strategy with the Fred Hervey Water Reclamation Plant since 1985.

D. *Direct Reuse Outside of Texas*

Texas is not alone in its creative reclaimed water strategies. In California, the East Bay Municipal Utility District has implemented a variety of uses for its reclaimed water with several additional projects planned for the future. Currently the East Bay Municipal Utility District's (East Bay MUD) North Richmond Water Reclamation Plant is one of the larger industrial cooling water reuse projects in the nation, with a design capacity of 5.4 million gallons a day. Chevron uses approximately 4.2 million gallons of the recycled water for the water in its cooling towers, which were traditionally using drinking water. The East Bay MUD estimates that use of the reclaimed water saves enough drinking water for approximately 25,000 residents in the area.[42] In the near future, the East Bay MUD has additional plans in the East Bayshore Recycled Water Project to provide approximately 2.2 million gallons of reclaimed water a day to nearby communities for irrigation of landscapes, toilets, restoration of wetlands and industrial purposes. The East Bay MUD also plans on constructing another reclaimed water system to provide 3.5 million gallons per day of reclaimed water for boiler make-up to a Chevron refinery in Richmond.[43]

Wastewater reuse is also implemented outside of the United States. In Palestine, the Gaza Wastewater Treatment Plant also practices direct recharge of treated effluent into the aquifer.[44] The Gaza plant utilizes sandy basins to further process the treated effluent prior to injection, but the concept remains similar to El Paso's project in that treated wastewater is re-introduced into an aquifer experiencing depletion. The Gaza aquifer is the sole source of water in the region, and is threatened by sea water and salt ground water intrusion. As a solution, Palestine has found that the introduction of treated wastewater meeting World Health Organization and Food and Agriculture Organization guidelines helps prevent aquifer depletion while ensuring that the quality of water injected will not pose health concerns.

There is also a collaborative effort including a coalition of Mediterranean countries to examine the application of and impacts of wastewater reuse; these countries include Cyprus, Jordan, Lebanon, Morocco, Palestine, Turkey, Spain, and Greece and the program is titled

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[42] East Bay Municipal Utility District, Current Water Recycling Projects, *available at* http://www.ebmud.com/environment/conservation-and-recycling/recycling/current-water-recycling-projects.

[43] East Bay Municipal Utility District , Water Recycling Projects Under Construction, *available at* http://www.ebmud.com/environment/conservation-and-recycling/recycling/water-recycling-projects-under-construction.

[44] Y. Mogheir, T. Abu Hujair, Z. Zomlot, A. Ahmed and D. Fatta, *Treated Wastewater Reuse in Palestine, available at* <http://www.uest.gr/medaware/PA-Yunes%20et%20al-Revised2%5B1%5D.doc>

MEDAWARE.[45] This Euro-Mediterranean partnership examines the reuse of wastewater, current strategies, treatment, application (particularly on crops) and impacts. Since some countries still practice the application of untreated wastewater, the goal of this collaborative effort is to allow for the education and free exchange of information on use of wastewater.

IV. THE FUTURE OF REUSE WATER:

A. *Risk vs. Perceived Risk*

Untreated wastewater carries a number of pollutants that could cause adverse health effects if directly applied to land or discharged to water. Untreated or raw wastewater discharged to a water way can unleash excess nutrients, such as phosphorus and nitrogen. At worst case, these excess nutrients result in eutrophication, an overgrowth of plants, algae, decay, resulting in anoxic water conditions and eventually fish kills. The release of untreated wastewater is a known risk.

Wastewater treatment systems are designed to reduce this risk, and will remove biodegradable organic matter, nutrients, pathogens and other matter specifically to avoid degradation of the water ways.[46] In some cases, an additional level of treatment (tertiary) is utilized for direct recharge applications, such as for the El Paso direct recharge project.

Even though there are regulations and technology in place to help ensure that the wastewater will not adversely impact the environment, there remains a stigma attached to application of wastewater effluent, particularly when the chances of personal physical contact increase. The concern of wastewater also increases where the wastewater may not be treated to a sufficient degree and there is an opportunity for the wastewater to commingle with surface and groundwater. Certainly there is cause for concern where wastewater is untreated or not treated according to regulatory requirements; yet, one must bear in mind that there are several other potential pollution sources to surface and groundwater that do not undergo treatment.

For example, leaking petroleum storage tanks, an unlined saltwater disposal pit, leaking pipeline, landfill, and surface runoff from an agricultural operation, could be contributions to water contamination concerns.[47]

B. *82nd Legislative Session*

In the next Legislative Session (82nd), Texas will be scrutinizing current water strategies and examining the role of alternative water supplies. In the 81st Legislative Charges, the House Committee of Natural Resources has been tasked with examining current groundwater regulations and management, potential regulatory impacts to the State Water Plan, other state

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[45] D. Fatta, I. Arslan Alaton, C. Gokcay, M. M. Rusan, O. Assobhei, M. Mountadar, and A. Papadopoulos, *Wastewater Reuse: Problems and Challenges in Cyprus, Turkey, Jordan and Morroco*, European Water 11/12: 63-69, 2005 *available at* < http://www.ewra.net/ew/pdf/EW_2005_11-12_08.pdf>.

[46] Dean T. Massey, *How Federal Law Encourages Land Application of Municipal Wastewater Effluents and Sludges*, 23 S. Tex. Law Journal 1 (1982).

[47] 2007 Texas State Water Plan, at Chapter 7.

practices regarding water management, water conservation strategies, as well as the "progress toward the development of recycled water resources and desalination projects."[48]

V. CONCLUSION

Treated wastewater, or reclaimed water, has been beneficially used in Texas for at least two decades, with regulations covering the use of reclaimed water since 1997. Use of reclaimed water is not novel to Texas, other states, or other countries. Yet, there is still a level of concern among the public with the application of treated wastewater, particularly with potential impacts to surface and groundwater. In the near future, the Texas government will be re-examining the recommended strategies for water management in the 2007 and proposed regional recommendations in the 2012 State Water Plan. There will most likely be an increased reliance on alternative water sources to the extent it is economically viable and readily available, in order to preserve and protect decreasing water supply in Texas.

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[48] Interim Committee Charges, Texas House of Representatives, 81st Legislature, *available at* http://www.house.state.tx.us/committees/charges/81interim/interim-charges-81st.pdf.

Robert J. Huston
Environmental Consultant (2004 - present)

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Austin, TX 78746
512-913-4554

Previous Experience:

Chairman - Texas Commission on Environmental Quality (1999-2003)
One of three full time commissioners who serve as the governing board for Texas' primary environmental regulatory agency. The Texas Commission on Environmental Quality (TCEQ), formerly known as the Texas Natural Resource Conservation Commission (TNRCC), is responsible for air, water, and waste permitting and compliance, and administers all major federal environmental programs delegated from the U. S. Environmental Protection Agency. The agency employs a staff of approximately 3,000 and operates from a headquarters office in Austin, Texas and sixteen (16) regional offices across the state. Total budget for the current fiscal year is approximately $450 million. Highlights during tenure as TCEQ Chairman:

Successfully guided the agency through the legislative sunset review process, resulting in agency reauthorization for 12 years.

Transformed the working relationship between the agency and EPA Region 6 to one of cooperative joint environmental protection.

Largely completed the planning and initiated implementation of statewide plans for achieving the national Ozone standards.

Worked with State leadership to create and fund the Texas Emission Reduction Program, a $750 million incentive grant program to advance technology development and its application to clean up heavy duty diesel engines.

Private Enterprise and Consulting (1994-1998)
Entered into a partnership and provided the investment capital for a high end designer furniture and antique store - Durham Trading & Design Company. Grew the business to in excess of $2.0 million in annual sales. Sold interest to business partner in 2001.

Held the position of Chief Financial Officer for Bonner Carrington Corporation - European Market which held the master licensing rights for Schlotzsky's Deli in eight European countries. Helped develop the franchise system in Germany and participated in the opening of the first two stores.

Completed an operations review for the management of Bluebonnet Electric Cooperative. Assessed the current operational status and made recommendations for improved organization and future opportunities.

Developed business plan and arranged financing for Cornerstone Home and Hardware Store. Led the development of all business systems and remained as a consultant through the first three years focusing on operations, budgeting and finance.

Prepared several strategy documents for the owners of substantial real estate in the warehouse district of downtown Austin, which has experienced significant growth and development.

Vice President of Operations - Planet Pacific, Inc. - Mission Viejo, California (1991-1993)
Two years after acquisition of Espey, Huston & Associates, Inc. by Planet Pacific, Inc (PPI), was asked to relocate to the headquarters of PPI as Vice President of Operations. PPI owned three engineering firms, and owned and operated approximately 250,000 square feet of commercial real estate in Southern California. Primary role was monitoring and coordination of engineering operations, acquisition evaluation, and regular reporting to the investors of PPI.

Executive Vice President - Espey, Huston & Associates, Inc. - Austin, Texas (1972-1991)
In 1972, founded Espey, Huston & Associates, Inc., an engineering and environmental consulting firm, with Dr. William H. Espey, Jr. Firm grew from its original four employees to a peak of nearly 1,000, with annual revenue approaching $50 million, providing a broad range of design and consulting services to private and public sector clients throughout the United States and beyond. At peak, operated nine offices throughout Texas, and 13 offices in eight other states and two foreign countries. Sold to Planet Pacific, Inc. In 1989, remaining as Chief Operating Officer.

Engineering Scientist and Section Manager - Tracor, Inc. - Austin, Texas (1965-1972)

Education:
B.A. with Honors in Mathematics, University of Texas at Austin - 1965
Graduate Studies, U.T. Austin - 1965-1967
H. Y. Benedict Memorial Scholarship in Mathematics - 1963

Professional Activities:
Environmental Council of the States (ECOS) – an association of State environmental agency heads
- Executive Board - 2001-2003
- Secretary-Treasurer - April, 2003 - August, 2003
- Vice President - August, 2003 - October, 2003

Member, Government Advisory Committee to EPA Administrator, NAFTA Commission for Environmental Cooperation - May, 2003 - August, 2005
Texas Water Conservation Association, Austin, Texas
- Board of Directors - 1978-present
- Vice President and Executive Board Member - 1981-1990
- President and Board Chairman - 1991-1992
- Recipient - 56th Annual Convention Dedication - March, 2000

Fellow and Advisory Council Member, Univ. of Texas Center for Public Policy Dispute Resolution - 2003 – present
Chairman, Texas Environmental Flows Science Advisory Committee – 2008 - present

Update - Senate Bill 3 Environmental Flow Standards

22nd Annual Texas Environmental Superconference
August 5, 2010

Robert J. Huston
Chairman, Texas Environmental FlowsScience Advisory Committee

1

Senate Bill 3 Goals

- Basin-specific Standards
- Science-based Environmental Flow Objectives
- Local Stakeholder Process to Balance Water Needs
- Certainty for Water Rights Permit Applicants
- Strong Adaptive Management Principles

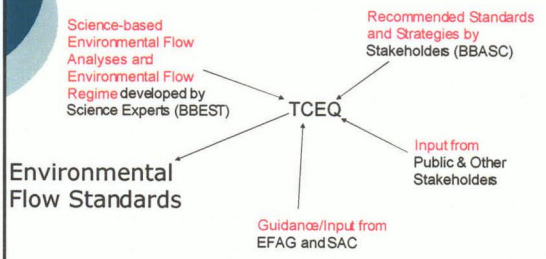
2

Players

- Environmental Flows Advisory Group (EFAG)
- Basin and Bay Area Stakeholder Committees (BBASC)
- Basin and Bay Expert Science Teams (BBEST)
- Science Advisory Committee (SAC)
- TCEQ – Water Rights Regulatory Role
- State Resource Agencies (TCEQ, TPWD, TWDB)

3

Establishing Environmental Flow Standards



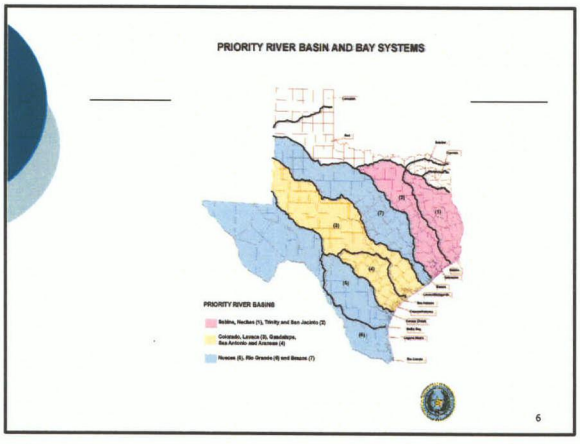
4

Environmental Flow Standards

- Standards must be:
  - "**adequate**" to support a "**sound ecological environment**"
  - to the "**maximum extent reasonable**"
  - after considering "**other public interests and other relevant factors**"
- TCEQ must apply the environmental flow standards to develop the appropriate conditions for water rights permits.

Water Code §§ 11.1471(a)(1), 11.147(e-3)

5



6

Time Table – Each Basin

- EFAG appoints BBASC members
- Stakeholders select BBEST members
- BBEST develops Environmental Flow Regime recommendations (12 mos.)
- BBASC recommends Flow Standards and Strategies (6 mos.)
- TCEQ adopts Environmental Flow Standards by rule (12 mos.)

7

Where are we in the Process?

- Tier 1 Basins
  Trinity/San Jacinto/Galveston Bay and Sabine/Neches/Sabine Lake
  - BBEST recommendations - Nov 2009
  - BBASC recommendations - May 2010
- Tier 2 Basins
  Colorado/Lavaca and Guadalupe/San Antonio
  - BBASC appointed and BBEST selected/underway
- Tier 3 Basins
  Nueces, Rio Grande and Brazos
  - Nominations for BBASC membership just closed (Nueces exception)

8

Lessons Learned - BBEST

- Don't underestimate the time commitment required from members - It is Significant
- "Collaborative Process designed to Achieve Consensus" requires constant attention
- Remember the audience who will receive the recommendations
- Use, within reason, the statute's Adaptive Management provisions

9

Lessons Learned - BBASC

- Recognize need for early engagement of the BBASC as BBEST progresses
- Provide time for constructive dialog with BBEST after they deliver their recommendations
- Use BBEST as a resource to aid the water needs "balancing" process
- Ditto re. Adaptive Management

10

Texas EFlows

And remember what Buzz Lightyear says:

"To infinity and beyond, whichever comes first"

http://www.tceq.state.tx.us/permitting/water_supply/water_rights/eflows/group.html

11

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BACKGROUND, EDUCATION AND PRACTICE

Mr. Petersen joined the TWDB in May 2008 as General Counsel. Prior to joining the TWDB, from 1999 to 2008, Mr. Petersen served as General Counsel for the Texas Rural Water Association (TRWA), and was also named its Deputy Executive Director in 2004.

Mr. Petersen served as the Deputy Director of the Office of Water Resource Management for the Texas Natural Resource Conservation Commission (now the Texas Commission on Environmental Quality) from 1996 to 1999. He directed the state's programs in water rights permitting, water and wastewater rates and utility service regulations, water quality standards and wastewater disposal permitting, and provided oversight of water districts.

Mr. Petersen was an attorney in private practice with Small, Craig and Werkenthin, P.C. from 1987 to 1996, providing legal services in water-related matters to public and private entities appearing before the Texas Natural Resource Conservation Commission and its predecessor agencies.

He also served in various legal capacities with the former Texas Water Commission/Texas Department of Water Resources from 1982 to 1987, and as an Assistant Attorney General of Texas, Law Enforcement Division, Civil Rights Section, in the Office of the Attorney General of Texas from 1979 to 1982.

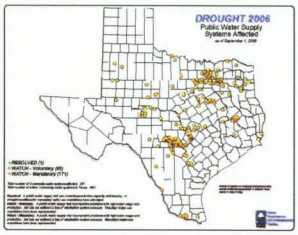
Mr. Petersen holds a Bachelor of Arts degree from the University of Texas and a Doctor of Jurisprudence from the University of Texas School of Law.

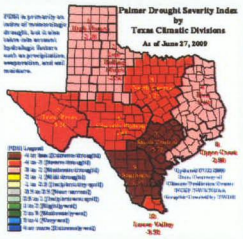
Just Around the Riverbend: Water Planning in Texas

22nd Annual Environmental Superconference
August 5 – 6, 2010

Ken Petersen, General Counsel
Texas Water Development Board

Why do we plan? Drought





Senate Bill 1: The Birth of Regional Water Planning

TWDB responsibilities:

- Designate regional water planning areas
- Designate initial regional water planning groups
- Provide technical and financial assistance to the regional water planning groups
- Approve regional water plans and facilitate resolution of interregional conflicts
- Develop State Water Plan every five years

Designation of Regional Water Planning Areas

Criteria:

- river basin and aquifer delineations
- water utility development patterns
- socioeconomic characteristics
- existing regional water planning areas
- political subdivision boundaries
- public comment
- other factors

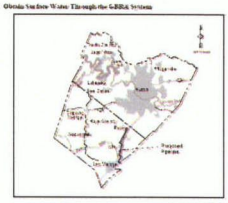
4

Basic Steps in Regional Water Planning

1. Describing the regional water planning area
2. Quantifying current and projected population and water demand
3. **Evaluating and quantifying current water supplies**
4. **Identifying** surpluses and **needs**
5. **Evaluating water management strategies and preparing plans to meet the needs**
6. Recommending regulatory, administrative, and legislative changes
7. Adopting the plan, including the required level of public participation

5

Task 5: Evaluation and Selection of Potentially Feasible Water Management Strategies

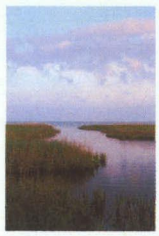


If existing supplies do not meet future demand, planning groups recommend specific water management strategies to meet water supply needs.

6

Types of Water Management Strategies

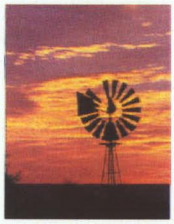
- Water conservation practices (must be considered for each identified need)
- Drought management measures
- Reuse of wastewater
- Expanded use of existing supplies
- **New supply development**
- Interbasin transfers
- Other measures



7

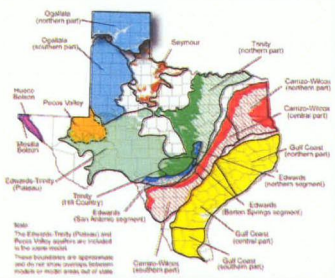
Supply: Groundwater

- Planning groups calculate the greatest annual amount of water available from an aquifer without violating the most restrictive physical and/or regulatory conditions limiting withdrawals under drought of record conditions.
- When estimating groundwater supplies, planning groups use TWDB Groundwater Availability Models unless better site specific information is available.



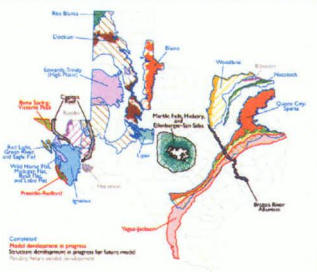
8

Groundwater Availability Models: Major Aquifers



9

Groundwater Availability Models: Minor Aquifers



"An existing water supply is the volume of water available ...under drought of record conditions taking into account any physical constraints *and any legal or policy constraints."*

TWDB 'General Guidelines for Regional Water Plan Development (2007-2011)' (Sept. 2008)

Each regional water planning group is required to submit a regional water plan to the TWDB that, *inter alia*, identifies each source of water supply in the planning area, including "information supplied by the executive administrator on the amount of managed available groundwater..."

Section 16.053(e)(3)(A), Water Code; quoted language added by CSHB 1763, 79th Legislature

"If groundwater districts within a groundwater management area have determined the desired future condition for their aquifers, and the TWDB has translated desired future conditions into an estimated managed available groundwater as of January 1, 2008, the planning groups must use these estimates as the basis for existing groundwater supplies."

TWDB 'General Guidelines for Regional Water Plan Development (2007-2011)' (Sept. 2008)

13

"Not later than September 1, 2010, and every five years thereafter, the [groundwater conservation districts within a groundwater management area] shall consider groundwater availability models and other data ...for the management area and shall establish desired future conditions for the relevant aquifers within the management area."

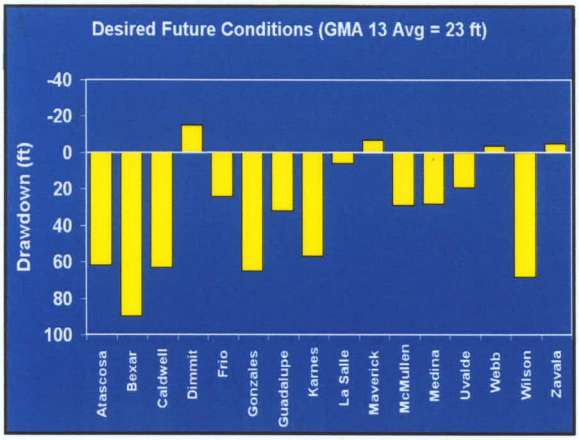
Section 36.108(d), Water Code

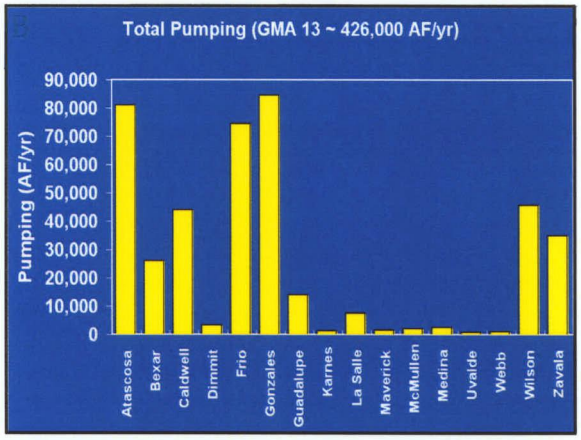
14

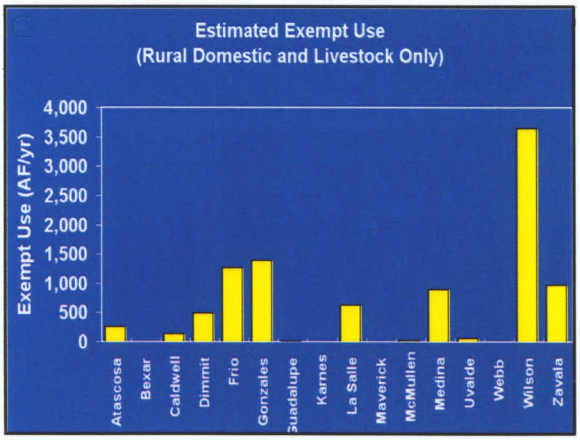
"'Managed available groundwater' means the amount of water that may be permitted by a district for beneficial use in accordance with the desired future condition of the aquifer..."

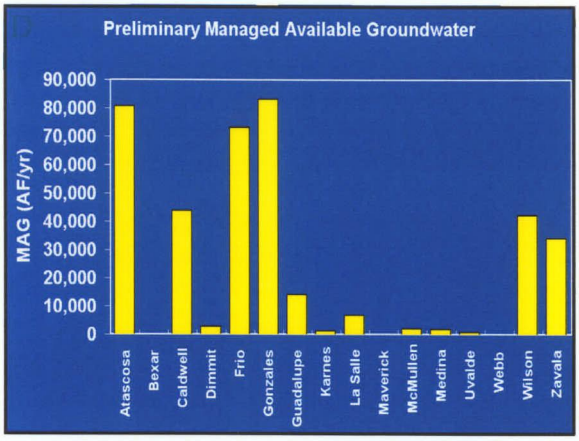
Section 36.001(25), Water Code; added by CSHB 1763, 79th Legislature

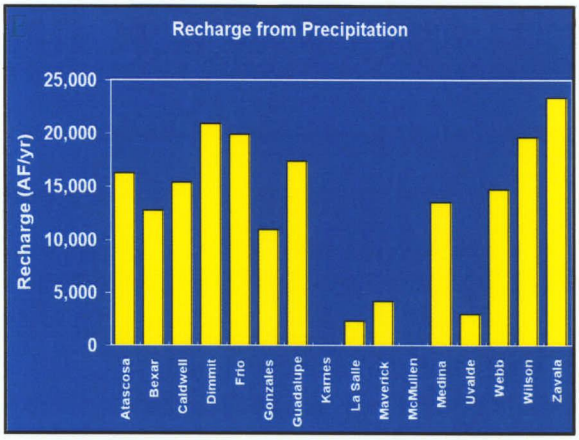
15

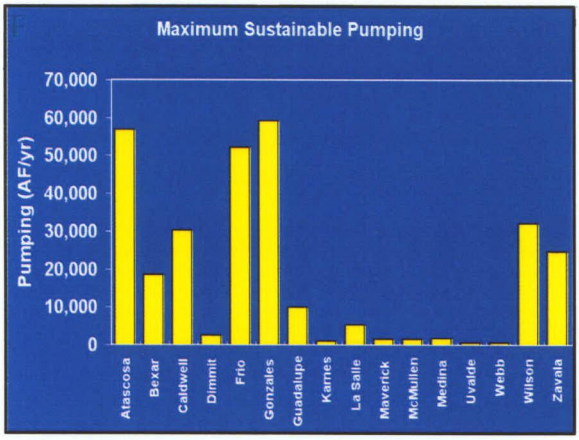

Desired Future Conditions (GMA 13 Avg = 23 ft)
Drawdown (ft)
-40
-20
0
20
40
60
80
100
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala

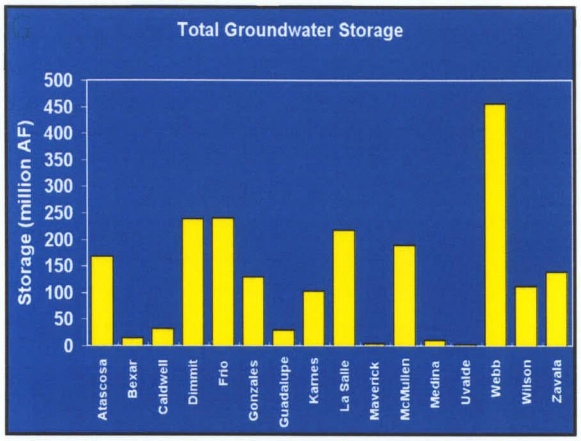

Total Pumping (GMA 13 ~ 426,000 AF/yr)
Pumping (AF/yr)
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala

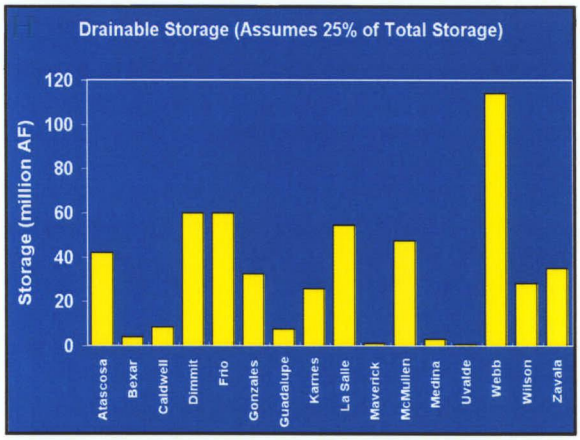

Estimated Exempt Use
(Rural Domestic and Livestock Only)
Exempt Use (AF/yr)
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala

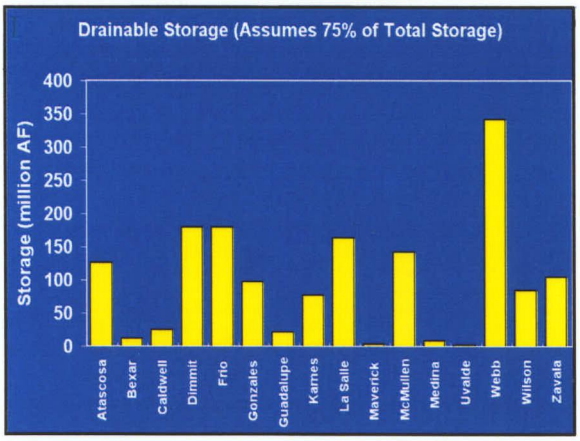

Preliminary Managed Available Groundwater
MAG (AF/yr)
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala


Recharge from Precipitation
Recharge (AF/yr)
25,000
20,000
15,000
10,000
5,000
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala


Maximum Sustainable Pumping
Pumping (AF/yr)
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala


Total Groundwater Storage
Storage (million AF)
500
450
400
350
300
250
200
150
100
50
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala


Drainable Storage (Assumes 25% of Total Storage)
Storage (million AF)
120
100
80
60
40
20
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala

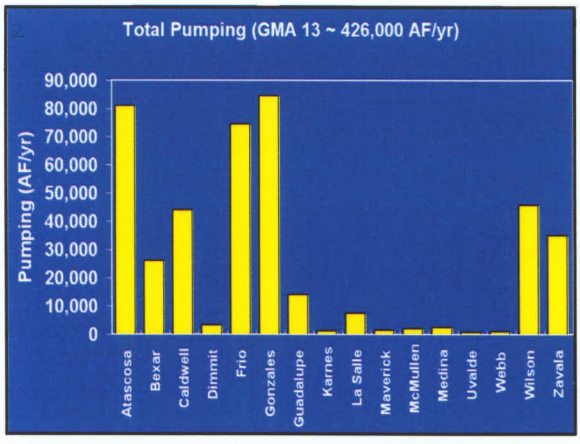

Drainable Storage (Assumes 75% of Total Storage)
Storage (million AF)
400
350
300
250
200
150
100
50
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala

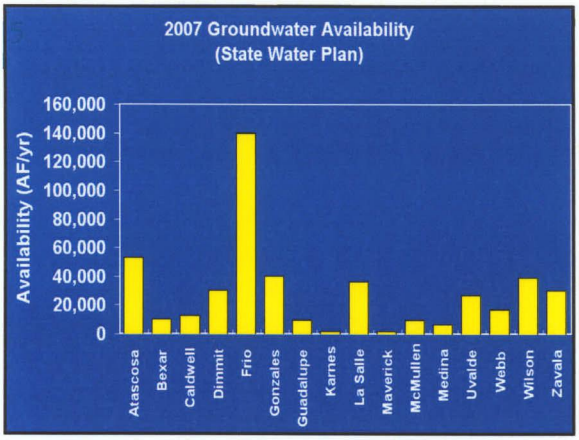
Summary

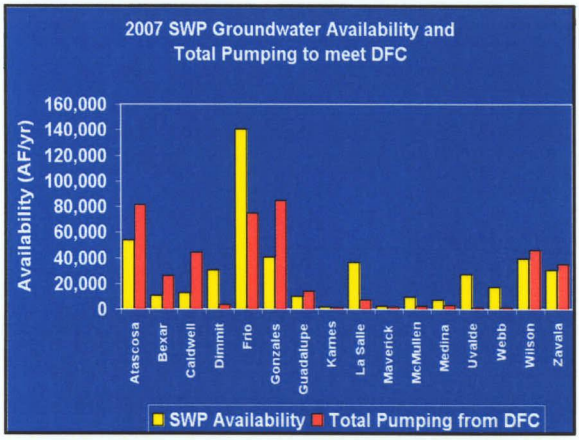
- Total Pumping 426,000 AF/yr
- Exempt Use 10,000 AF/yr
- MAG 416,000 AF/yr
- Recharge from Precip 194,000 AF/yr
- Max Sustainable Pumping 298,000 AF/yr
- Storage 2.1 billion AF
- Drainable Storage 0.5 to 1.6 BAF

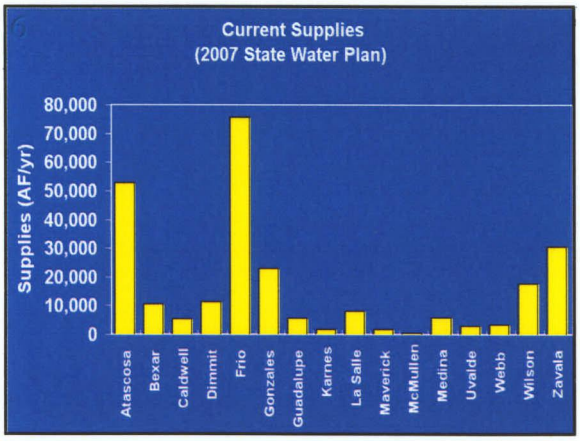
Groundwater Management Area 13 Joint Planning Summary and Comparison to Related Numbers Associated with Hydrogeology of Region

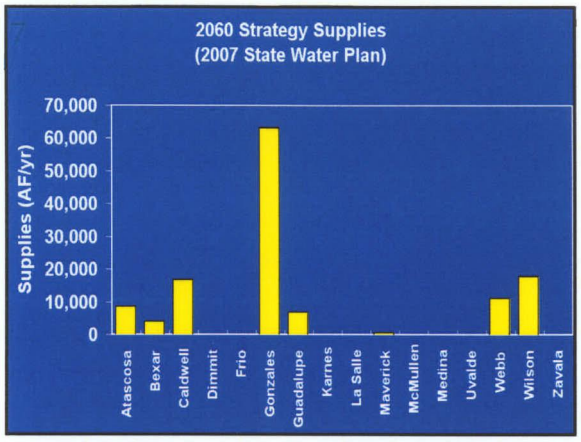
	Column A	*Column B*	*Column C*	*Column D*	*Column E*	*Column F*	*Column G*	*Column H*	*Column I*
County	**Desired Future Condition (ft of drawdown in 2060)**	**Total Pumping Consistent with Desired Future Condition (AF/yr)**	**Estimated Exempt Use in 2060 (AF/yr)**	**Managed Available Groundwater in 2060 (AF/yr)**	**Recharge from Precipitation (AF/yr)**	**Maximum Sustainable Pumping (AF/yr)**	**Total Groundwater in Storage (million AF)**	**Drainable Groundwater (20% of storage, million AF)**	**Drainable Groundwater (70% of storage, million AF)**
Atascosa	62	81,004	260	80,744	16,215	54,701	167.16	41.79	125.37
Bexar	90	26,107	N/A	N/A	12,684	18,204	15.14	3.79	11.36
Caldwell	65	43,929	150	43,780	15,355	30,227	32.56	8.14	24.42
Dimmit	-15	3,350	490	2,866	20,899	2,352	238.45	59.61	178.82
Frio	24	74,614	1,260	73,351	19,899	52,219	238.71	59.68	179.03
Gonzales	65	84,587	1,587	83,200	10,876	59,203	129.50	32.37	97.12
Guadalupe	52	14,043	18	14,025	17,363	9,901	28.85	7.21	21.64
Karnes	57	1,280	3	1,273	0	896	102.28	25.57	76.71
La Salle	6	7,442	633	6,809	2,270	5,209	217.05	54.26	162.79
Maverick	-7	1,530	N/A	N/A	4,008	1,415	3.65	0.91	2.74
McMullen	29	2,045	20	2,025	0	1,417	188.48	47.12	141.36
Medina	28	2,554	894	1,660	15,408	1,754	11.25	2.81	8.44
Uvalde	19	828	60	768	2,919	558	2.29	0.57	1.71
Webb	-4	916	N/A	N/A	14,712	641	455.84	113.96	341.88
Wilson	68	45,780	3,641	42,139	19,423	32,043	111.71	27.93	83.78
Zavala	-5	34,999	972	34,027	23,371	24,523	138.64	34.66	103.98
Total	**33**	**428,791**	**9,776**	**410,926**	**193,730**	**298,822**	**2,001.63**	**520.38**	**1,561.15**

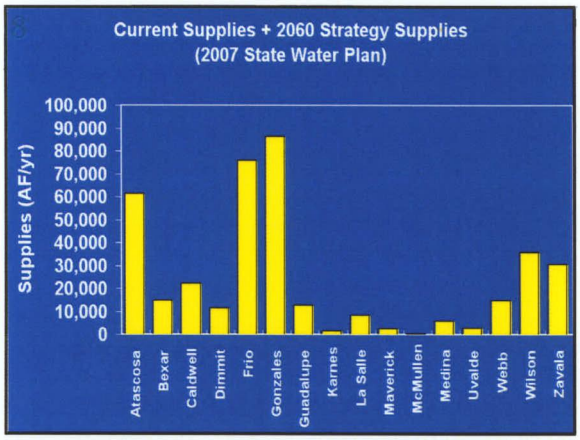


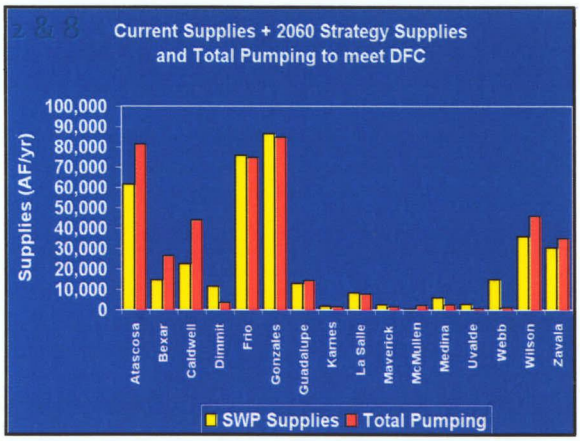

2007 Groundwater Availability
(State Water Plan)
Availability (AF/yr)
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala


2007 SWP Groundwater Availability and
Total Pumping to meet DFC
Availability (AF/yr)
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala
SWP Availability
Total Pumping from DFC


Current Supplies
(2007 State Water Plan)
Supplies (AF/yr)
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala


2060 Strategy Supplies
(2007 State Water Plan)
Supplies (AF/yr)
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala


Current Supplies + 2060 Strategy Supplies
(2007 State Water Plan)
Supplies (AF/yr)
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala


Current Supplies + 2060 Strategy Supplies
and Total Pumping to meet DFC
Supplies (AF/yr)
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Atascosa
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Karnes
La Salle
Maverick
McMullen
Medina
Uvalde
Webb
Wilson
Zavala
SWP Supplies
Total Pumping

Summary

- Total Pumping 426,000 AF/yr
- SWP GW 468,000 AF/yr

  Current Supplies and Strategies

Groundwater Management Area 13 Joint Planning Summary and Comparison to Related Numbers Associated with 2007 State Water Plan

	Column 1	*Column 2*	*Column 3*	*Column 4*	*Column 5*	*Column 6*	*Column 7*	*Column 8*
County	Desired Future Condition (ft of drawdown in 2060)	Total Pumping Consistent with Desired Future Condition (AF/yr)	Estimated Exempt Use in 2060 (AF/yr)	Managed Available Groundwater in 2060 (AF/yr)	2007 State Water Plan Groundwater Availability in 2060 (AF/yr)	2007 State Water Plan Current Supplies (AF/yr)	2007 State Water Plan Supply Strategies in 2060 (AF/yr)	Current Supplies plus Strategies (AF/yr)
Atascosa	62	81,004	260	80,744	53,336	52,694	8,514	61,208
Bexar	90	26,107	N/A	N/A	10,552	10,552	4,092	14,644
Caldwell	63	43,929	130	43,799	12,828	5,395	16,875	22,270
Dimmit	-15	3,359	493	2,866	30,277	11,275	0	11,275
Frio	24	74,614	1,263	73,351	140,025	73,671	0	73,671
Gonzales	65	84,587	1,387	83,200	40,192	22,859	63,176	86,035
Guadalupe	32	14,043	18	14,025	9,947	5,651	6,957	12,608
Karnes	57	1,280	5	1,275	1,803	1,685	0	1,685
La Salle	6	7,442	633	6,809	36,630	8,209	0	8,209
Maverick	-7	1,530	N/A	N/A	2,066	1,803	641	2,444
McMullen	29	2,045	20	2,025	9,614	453	0	453
Medina	28	2,534	894	1,640	6,966	5,907	0	5,907
Uvalde	19	828	60	768	27,093	2,846	0	2,846
Webb	-4	918	N/A	N/A	17,176	3,551	11,177	14,728
Wilson	68	45,780	3,641	42,139	39,434	17,806	17,895	35,701
Zavala	-5	34,969	972	33,997	30,475	30,474	0	30,474
Total	23	428,711	9,776	418,935	468,414	256,834	120,327	386,158

Water Infrastructure Fund

"The water infrastructure fund is a special fund in the state treasury to be administered by the board... Money in the fund may be used to pay for the implementation of water projects recommended through the state a regional water planning processes..."

Section 15.973(a), Water Code;
enacted by 77th Legislature ("Senate Bill 2")

Under TWDB rules, interest rates for WIF loans are based on the borrower's market rate and TWDB's cost of issuance, less the available subsidy. The legislature has appropriated sufficient general revenue prior two sessions for an additional subsidy of 200 basis points.

The TWDB may deliver funds for a WIF new water supply project that develops and/or transmits the water "only if the executive administrator makes a written finding that the applicant ... has the right to use water that the project will provide, if the applicant is proposing groundwater development."

Section 15.975(c)(2), Water Code

37

Contact Information

Phone:

475-1673

Email:

ken.petersen@twdb.state.tx.us

38

Ron Gouguet
Associate
Windward Environmental, LLC

- Windward Environmental, LLC
- An estuarine ecologist and multi-disciplinary expert experienced in NRDA, habitat restoration, ecological risk assessment and ecological services valuation and accounting.
- 30 years' experience in natural resource damage assessment (NRDA), including 15 years as a NOAA natural resource trustee representative.
- Experience at approximately 85 hazardous waste sites and over 10 chemical and oil spills.

Mr. Gouguet is an ecological risk assessor and restoration expert with over 30 years' experience in natural resource damage assessment (NRDA). Prior to joining Windward, he served as a coastal resource coordinator (CRC) for the National Oceanic and Atmospheric Administration (NOAA), where he worked to protect NOAA trust resources at a variety of hazardous waste sites. As a multi-disciplinary expert, Mr. Gouguet has led integrated remediation and restoration planning efforts within the US Environmental Protection Agency's (EPA's) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (i.e., Superfund) program and for Resource Conservation and Recovery Act (RCRA) and state-lead sites in Texas, Louisiana, Delaware, and Oregon. During his career, he has been involved in cleanup and restoration efforts at approximately 85 hazardous waste sites and responded to over 10 chemical or oil spills.

Mr. Gouguet began his career as a marine biologist in the State of Louisiana's environmental monitoring program for the Louisiana Offshore Oil Port (LOOP). In his 10 years with the state, he served in several oil spill preparedness and response roles. He was the Louisiana Department of Wildlife and Fisheries (LDWF) representative at RRT6 contingency planning sessions, was a member of the Dispersant Use Task Force, represented LDWF at meetings concerning the Minerals Management Service (MMS) dispersant toxicity test program; was a Louisiana co-representative at MMS Scientific Review Board meeting; and attended and participated in numerous EPA/US Coast Guard (USCG)/API oil spill conferences, tabletop oil spill exercises, and oil spill responses. It is notable that Mr. Gouguet developed the first dispersed oil-in-water monitoring program for the LOOP project environmental monitoring section of its contingency plan. In addition, he designed and supervised a chronic sediment oil pollution monitoring program and served as contract representative to analysis laboratories. From June 1991 to January 1992, he served as the first Deputy Oil Spill Coordinator in the Office of the Governor, where he developed budgets, responded to oil spills, coordinated among state trustee agencies, served as deputy trustee, and developed a draft oil spill response and NRDA regulations package.

While at NOAA, Mr. Gouguet served from 1992 to 1996 as the Department of Commerce/NOAA RRT6 representative and participated in several oil and chemical spill responses. While serving as an RRT 6 representative, he was instrumental in the effort to expand the LOOP marine oil spill dispersant pre-approval plan, which covered all marine waters in Region 6, and to develop and approve the region's *in situ* burn pre-approval plan.

Mr. Gouguet's specialty is consensus building and the integration of response and restoration processes, and he is a proponent of collaborative CERCLA actions that flexibly integrate remedial investigation (RI),

risk assessment (RA), NRDA, restoration planning, and project construction among NOAA's response agency, co-trustees, the public, and individual potentially responsible parties (PRPs). To meet these objectives, Mr. Gouguet seeks to identify common goals and establish trust among all interested parties. He then advocates the use of shared databases, geographic information systems (GIS), and other information visualization techniques to transparently share information, reach consensus, and promote informed decisions. The efficiency gained through this effective integration of response and restoration has enabled team members at numerous hazardous waste sites to overcome significant challenges, resulting in both protective remedies and cooperative settlements for restoration. His success in these efforts has been acknowledged by EPA and NOAA, which awarded Mr. Gouguet several Bronze Medals for his contributions to successful remediation and restoration projects.

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Coordination of Response and Restoration at the Bailey Waste Disposal Site, Bridge City, Texas

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Introduction

Under CERCLA, EPA has primary responsibility for remedy selection. EPA is charged with implementing remedies that eliminate unacceptable risks to human health and the environment posed by the release or threatened release of hazardous substances. Natural resource Trustees have the responsibility under the statute to restore, replace or acquire the equivalent of natural resources injured by the release of hazardous substances. Performance of these statutory functions includes scientific evaluations to inform decisions. In both situations, the ultimate financial responsibility rests with those who are known under CERCLA as "Potentially Responsible Parties" or "PRPs."

ERA and NRDA are both creations of law that embody the policy that we should have an environment that provides valuable public and natural resource services and that poses no unacceptable unnatural risks. Those laws, such as the Comprehensive

Environmental Response, Compensation, and Liability Act (CERCLA) and its state law counter parts, charge government federal, state, and tribal authorities with the duty to remediate toxic contamination and restore or secure compensation for natural resource injuries. Both were relatively new back in 1992 when the Bailey Waste Disposal Site cleanup was underway. Then, as a new NOAA employee, the author was told that the goal was to get EPA to protect fish and wildlife as well as people during their Superfund cleanup. Accounting for lost "natural resources" and restoration also were to be accomplished. In Texas, reasonable people believed that all could be done efficiently.

The remedial investigation and natural resource damage assessment are similar but different processes that should be coordinated, but the historical pattern was that EPA typically conducted its RI/FS, before the Trustees began to conduct their NRDA. From 1992-1996, the "Bailey Team" worked together to accomplish all of these objectives efficiently, even when faced with numerous setbacks. .The Trustees and the PRP group (the Bailey Site Settlors Committee, BSSC) worked on a cooperative, restoration based assessment with the intent of achieving a universal settlement of CERCLA liability at the site. The degree of coordination and cooperation among that the BSSC (PRPs), the Environmental Protection agency (EPA), and the natural resources trustees (TPWD, TCEQ, GLO, NOAA, FWS) was unprecedented for the time and led the way for how these sites could be handled in Texas.

Site Background

The Bailey Waste Disposal Site was one of the original pre-superfund sites identified in the Waste Disposal Site Survey (Eckhardt Survey) that completed by Congress in 1979. in the 1979 and was identified as one of the worst in the country.

The 112-hectare Bailey Waste Disposal Site was located approximately 5 km southwest of Bridge City, Orange County, TX, the facility originally consisted of 2 ponds (52 ha & 30 ha respectively) which were constructed in an abandoned river meander feature by dredging the salt marsh and piling the dredged sediment along the edges of the ponds to form levees (Figure 1). The ponds were used for freshwater recreational fishing as part of the Bailey Fish Camp in the mid-1950's. The fish camp was closed in the early 1960's after the storm surge from hurricane Carla overtopped the levees and the ponds became incapable of supporting freshwater fish. Industrial and municipal waste disposal began in the 1950's. Industrial waste disposal was discontinued in the late 1960's, but municipal and construction wastes were accepted until about 1971 (Figure 2)

Clean – up

Remedial Investigation focused on waste pits, the eastern levee of Pond A, the drum disposal area, and the drainage channel east of Pond A. In addition, several waste samples were collected in waste depositional areas on-site. Immediately off-site, the "tarry mass" a result of contaminant migration into the north marsh area was

delineated. In the remainder of the surrounding marsh, no problematic contamination was found, except in the immediate vicinity of the mass .

The Bailey team formulated plans for the cleanup and restoration of the heavily contaminated site and tarry mass in the adjacent salt marsh. However, implementation of the remedy required some 'adaptive management'.

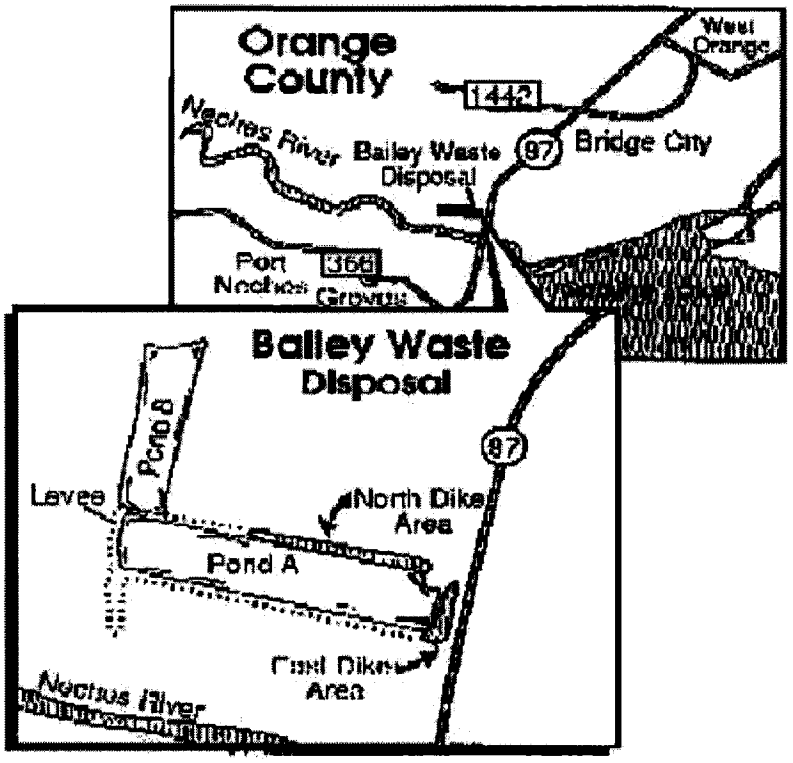

Figure 1. Bailey Waste Superfund Site, Orange County, Bridge City, Texas (source: USEPA)

An attempt at onsite in situ stabilization of wastes began in September 1993. The contractor had problems meeting the project stabilization requirements. The companies, as directed by the EPA, reevaluated the original remedy and developed potential remedy alternatives.

An Explanation of Significant Differences (ESD) was issued on February 8, 1996 that addressed waste in the site's North Marsh area (the tarry mass). Affected marsh sediments were excavated from the North Marsh and taken off-site for disposal in a Class 1 industrial waste landfill rather than being relocated, stabilized and capped onsite.

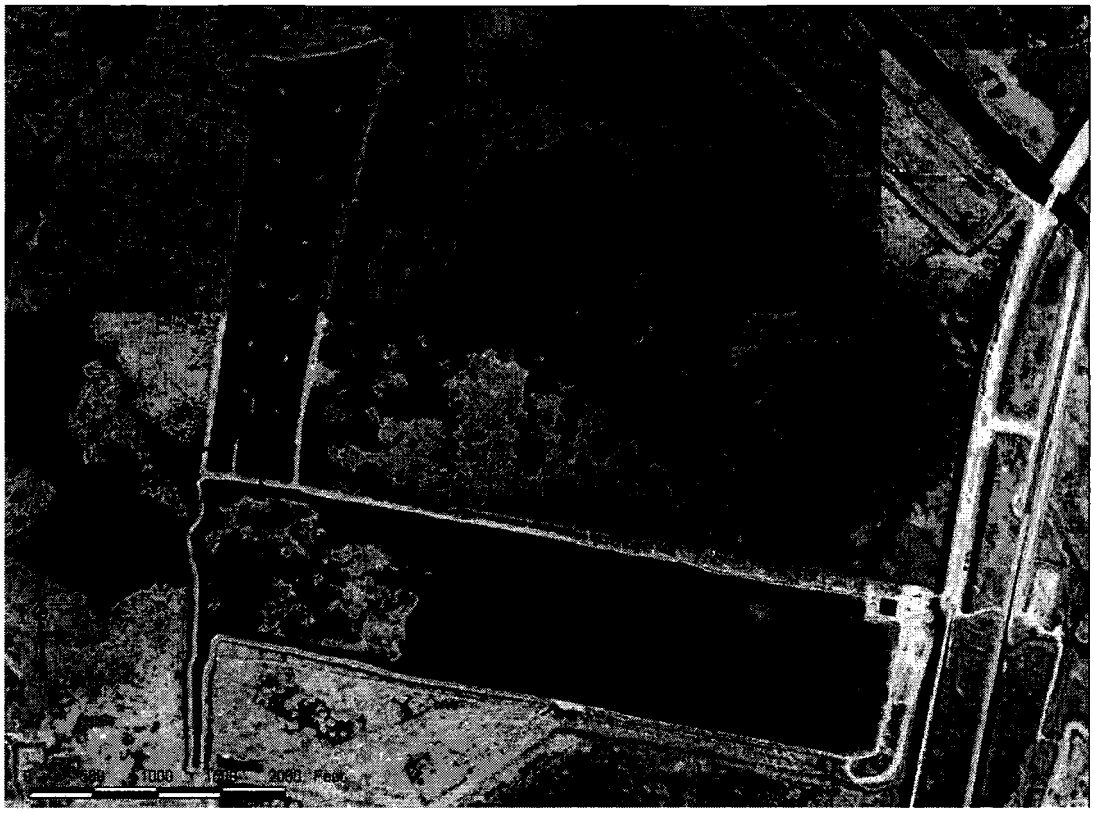

Figure 2. The Bailey Waste Superfund Site, Orange County, Bridge City, Texas (source: 1995 USGS aerial photo)

Another ESD was issued on May 1, 1996, that waste in the site's Pit B and was implemented by the PRPs. Approximately 12,000 cubic yards of waste and affected sediments contained within Pit B were excavated and taken off-site for disposal. Pit B may have been the source of waste which had migrated into the North Marsh.

A Record of Decision Amendment (12/16/96) was issued after the end of a public comment period in which EPA received no comments either in writing or during the ROD Amendment public meeting. Under these amendments, contaminated sediments from this North Marsh area and about 12,000 cubic yards of wastes from Pit B were removed for off-site disposal. The BSSC completed all on-site remedial construction activities by August 1997. The final remedy also included waste consolidation; grading and light capping within the Site's waste areas; installation of controls to manage and treat storm water run-off from inactive and completed remedy areas; and adjustments to dike elevations and slopes necessary to construct the cap, address areas with excessive settlement and protect against future erosion (Figure 3) .

The trustees continued to participate in the remedial process, and were certain that the site and the marsh would be able to recover after its implementation. However, under

CERCLA law, the PRPs must compensate the public for the loss of the natural resources while they were injured.

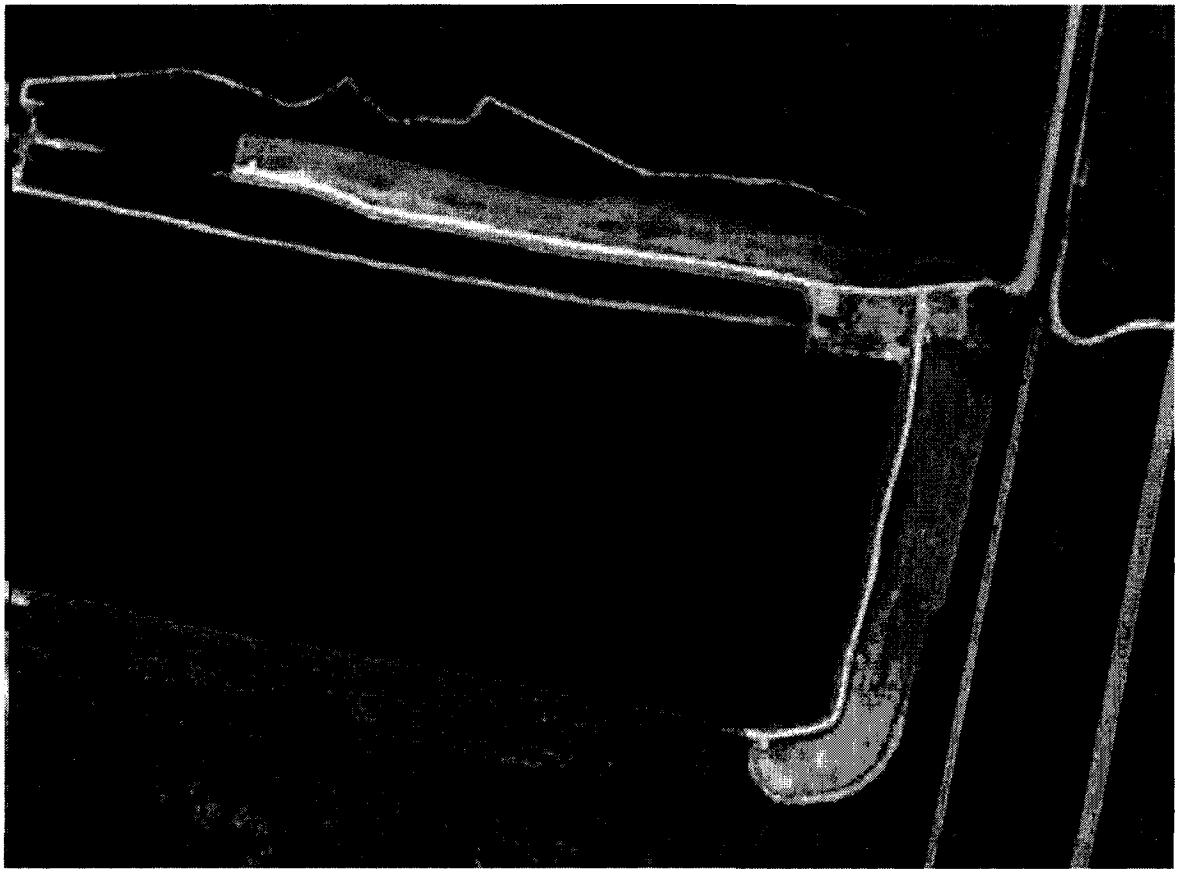

Figure 3. Completed remedial construction, Bailey Waste Disposal Superfund Site, Orange County, Texas. (source: 2005 USGS aerial photo)

NRDA

Relatively early in the site's remedial process, the Trustees approached the BSSC about the concept of resolving its potential NRDA liability as part of a 'global CERCLA settlement'. While remedial guidance abounded, little work had been done in the NRDA arena and none on the proper conduct of a coordinated effort. The optional CERCLA NRDA rules were not particularly instructive as they described a process to support litigation to recover dollar damages not to develop restoration based settlements.

A couple of factors helped promote this idea : the extent of contamination at the site was understood, the trustees and the BSSC were familiar with each other through the RI process and opportunities for cost effective restoration of the wetlands ijn this part of the were manifold (Figure 4). Additionally, construction methods to rebuild habitat features were well understood so the cost of providing sufficient restoration credit was not expected to be exorbitant.

Cautiously, the BSSC and Trustees undertook the cooperative assessment of NRDA damages with the readily available information developed as part of the RI/FS process, as well as information on these contaminants in the existing scientific literature and their own knowledge of and experience in Texas estuarine ecosystems.

The team worked together to agree to:

- the area of each habitat type covered by wastes containing hazardous substances, covered by the migration of wastes containing hazardous substances or disturbed by remedial activities,
- whether habitat service losses in these areas were total or partial,
- whether the service losses in these areas were permanent or would recover with time, and
- the duration of any service losses.

This information was input to a habitat equivalency analysis (HEA) to estimate the total potential loss of wetland acre-years represented by the natural resource injuries associated with the various habitats within the Site.

A complication was that seven types of habitats were affected by hazardous substances released at the Site. These habitats included subtidal unvegetated benthic habitats, estuarine and freshwater marsh habitats, and terrestrial habitats. A workgroup comprised of 6 wetland scientists with knowledge of Texas estuarine systems (3 participating on behalf of the BSSC and 3 on behalf of the Trustees)

Using a process known as multiple attribute decomposition, each workgroup scientist scored each of the 7 habitat types based on its resource functions relative to estuarine marsh, taking into account functions such as primary productivity, habitat value, nutrient export, etc. These scores were then combined, averaged and adjusted or "normalized" to the estuarine marsh standard to create the habitat normalization factors ("Normalized Average"). Service losses associated with the impacts to high marsh, fresh marsh, pond, ditch, and upland habitats were 'normalized' to estuarine marsh losses for restoration scaling purposes. Focus on an actual restoration concept w/o preselection under restoration planning and public participation

In addition to the cooperative/collaborative approach, the Trustees and BSSC used a number of innovative approaches and techniques in this assessment.

- Geographic Information System based Spatial Analysis
  - habitat mapping to determine the number of injured acres of each habitat type at the Site. .
- Separate, well coordinated Legal and Technical workgroups
- Use of Natural Resource Service Accounting HEA
- Habitat Trade-off ratios to normal losses to a single scalable type
- Establishment of basic cost items

The HEA method was used to estimate the scale of estuarine marsh creation needed to offset the 10 acres of assessed tidal marsh losses (at 100% LOS). The analysis covered

several injury/restoration scenarios (to account for uncertainty associated with certain technical issues), which yielded a range estimate of the wetland compensation required of approximately 13 to 28 acres. Absent information necessary to further refine the analyses, the team proceeded conservatively, and agreed that approximately 28 acres of estuarine marsh habitat would have to be created. The team then used available information on the potential costs to implement this type and scale of restoration in the vicinity of the Bailey Site as a basis for negotiating a monetized damages settlement.

Figure 4. Bessie Heights Oilfield Restoration site ca. 1995 (source: USGS)

Restoration

The Trustees worked with the U.S. Army Corps of Engineers to secure Water Resources Development Act (WRDA) Section 204 funding. Damages were applied as matching

funds that nearly tripled the area of marsh created. The Trustees also partnered with the Jefferson County Navigation District (JCND) to have it serve as the local sponsor of the project. Dredged material was placed (construction completed) in September - October 2003. Section 204 provides for protection, restoration, and creation of aquatic and wetland habitats in connection with construction and maintenance dredging of an authorized project. Approximately 651,000 cubic yards of dredged material were pumped into an approximate 71-acre tract of the Bessie Heights marsh area (Figure 5).

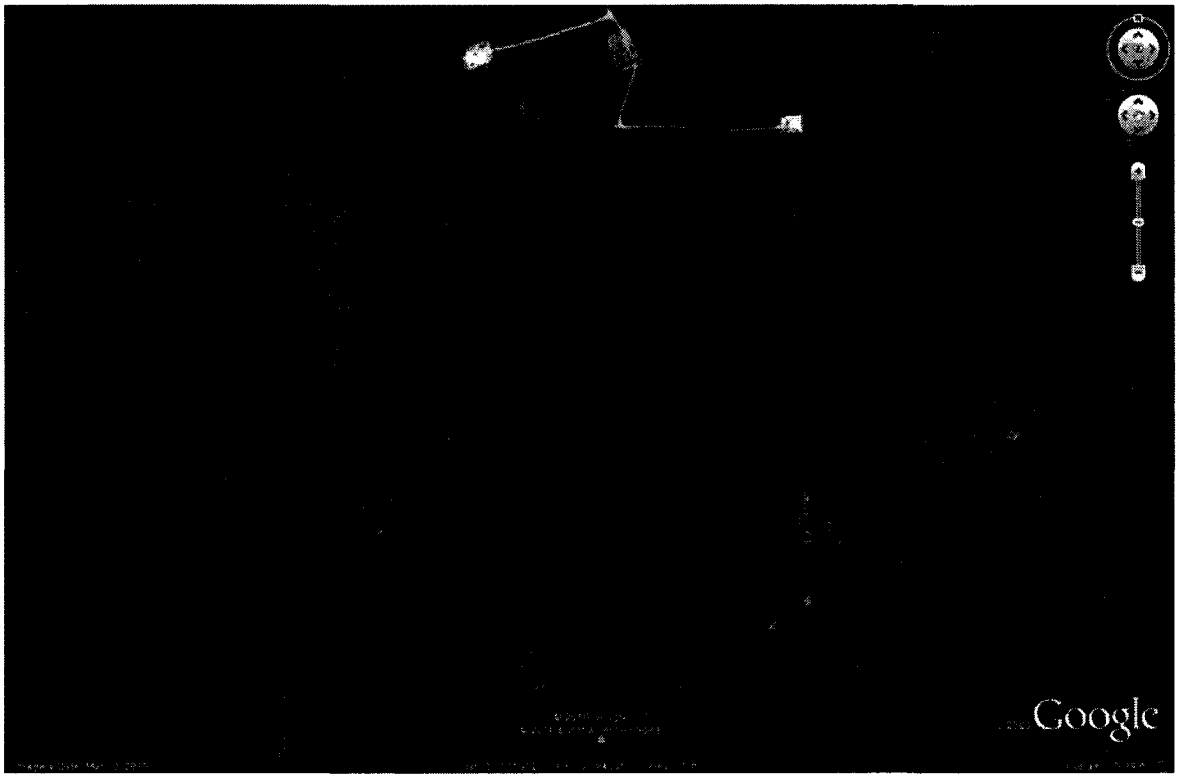

Figure 5. Bessie Heights Oilfield Restoration site 2010 (source: Google Earth)

Summary

The Bailey NPL Site like many such sites went through many fits and starts on the road to resolution. Here, the companies, response agencies and trustees rolled up their sleeves and went to work. Our combined effort led to effective restoration of the site and created a large area of marshland that to this day provides ecological services such as fish production and bird habitat in the Sabine Lake estuary. Coordination of remediation and restoration in Texas promoted synergies and effective decision making during the effort. The approach was successful and has been applied at many other sites in Texas and elsewhere in the United States to successfully complete site clean-up and restoration. Based on these successes, the Society of Environmental Toxicology and Chemistry convened a workshop to in August 2008 to examine the approaches to coordination of remedial work and NRDA. Two of the co-authors and some of the

former BSSC representatives that pioneered the approach at Bailey organized the workshop.

Rememberance

Mr. Tom Jackson at the Jefferson Country Navigation District was the Trustees' partner in cutting through onerous USACE legal requirements. Shortly after this agreement was executed, Mr. Jackson, long-time director of the Port of Jefferson County, died unexpectedly. His Texas-style "get it done" approach enabled realization of the project and we are indebted to him.

Further Information

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Trustee Counsel - Damage Assessment and Restoration Plan
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Translating Ecological Risk to Ecosystem Service Loss

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Special Series

EDITOR'S NOTE:

This is 1 of 4 papers reporting on the results of a SETAC technical workshop titled "The Nexus between Ecological Risk Assessment and Natural Resource Damage Assessment under CERCLA: Understanding and Improving the Common Scientific Underpinnings," held 18–22 August 2008 in Montana, USA, to examine approaches to ecological risk assessment and natural resource damage assessment in US contaminated site cleanup legislation known as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

ABSTRACT

Hazardous site management in the United States includes remediation of contaminated environmental media and restoration of injured natural resources. Site remediation decisions are informed by ecological risk assessment (ERA), whereas restoration and compensation decisions are informed by the natural resource damage assessment (NRDA) process. Despite similarities in many of their data needs and the advantages of more closely linking their analyses, ERA and NRDA have been conducted largely independently of one another. This is the 4th in a series of papers reporting the results of a recent workshop that explored how ERA and NRDA data needs and assessment processes could be more closely linked. Our objective is to evaluate the technical underpinnings of recent methods used to translate natural resource injuries into ecological service losses and to propose ways to enhance the usefulness of data obtained in ERAs to the NRDA process. Three aspects are addressed: 1) improving the linkage among ERA assessment endpoints and ecological services evaluated in the NRDA process, 2) enhancing ERA data collection and interpretation approaches to improve translation of ERA measurements in damage assessments, and 3) highlighting methods that can be used to aggregate service losses across contaminants and across natural resources. We propose that ERA and NRDA both would benefit by focusing ecological assessment endpoints on the ecosystem services that correspond most directly to restoration and damage compensation decisions, and we encourage development of generic ecosystem service assessment endpoints for application in hazardous site investigations. To facilitate their use in NRDA, ERA measurements should focus on natural resource species that affect the flow of ecosystem services most directly, should encompass levels of biological organization above organisms, and should be made with the use of experimental designs that support description of responses to contaminants as continuous (as opposed to discrete) variables. Application of a data quality objective process, involving input from ERA and NRDA practitioners and site decision makers alike, can facilitate identification of data collection and analysis approaches that will benefit both assessment processes. Because of their demonstrated relationships to a number of important ecosystem services, we recommend that measures of biodiversity be targeted as key measurement endpoints in ERA to support the translation between risk and service losses. Building from case studies of recent successes, suggestions are offered for aggregating service losses at sites involving combinations of chemicals and multiple natural resource groups. Recognizing that ERA and NRDA are conducted for different purposes, we conclude that their values to environmental decision making can be enhanced by more closely linking their data collection and analysis activities.

Keywords: Ecological risk assessment Natural resource damage assessment Ecosystem services Assessment endpoints Environmental decision making

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INTRODUCTION

Environmental management of hazardous sites in the United States often involves 2 activities legislated in the Comprehensive Environmental Response, Compensation,

and Liability Act (CERCLA, or Superfund): remediation of contaminated environmental media, and restoration of or compensation for injured natural resources and losses of the services they provide. Remediation is usually overseen at the federal level by the US Environmental Protection Agency (USEPA); restoration of injured natural resources is conducted by certain federal, state, and tribal groups (Natural Resource Trustees) through the natural resource damage assessment (NRDA) process. Superfund remedial decisions are informed by the remedial investigation/feasibility study (RI/FS) process which includes ecological risk assessment (ERA). The focus of the ERA is to determine the risk to ecological receptors posed by chemical and physical stressors at a Superfund site and ultimately to inform clean-up decisions. In NRDA, Trustees quantify the magnitude of injury (impact) sustained by natural resources and the services they provide due to the release of oil or hazardous substances and scale the damage claim to provide the appropriate amount of restoration. The technical information required by the 2 assessment processes is similar in many regards and includes the distribution and concentrations of the chemicals of concern, the actual or potential degree of exposure by ecological receptors, and the potential for or measurement of adverse effects resulting from these exposures (see Gala et al. 2009).

The CERCLA provides, and in certain cases requires, that an assessment of natural resource damages be brought after the remedy selection process, reasoning that until a remedy is selected by the USEPA, the Trustees lack sufficient information to reasonably evaluate and seek appropriate compensation for injured natural resources and the services they provide. Until recently, the ERA and NRDA processes have been conducted independently of one another at sites where both are conducted, with the ERA often being completed before the NRDA begins. While acknowledging that Superfund ERA and NRDA have distinct purposes under CERCLA (see also Gala et al. 2009; Gouguet et al. 2009), it is reasonable to evaluate the extent to which the 2 processes can and should be mutually supportive. It is becoming clear to practitioners of ERA and NRDA that there is considerable overlap in the types of data needed to inform decision making. Although a limited portion of the data collected and analyzed for an ERA has been used to inform the NRDA process, for the most part ERA information has not been of sufficient specificity or robustness to address most of the needs of the NRDA. Some of the common elements of ERA and NRDA, such as collecting and assessing environmental data, have been described (Barnthouse and Stahl 2002). Yet, neither the scientific underpinnings of these overlaps nor the degree or magnitude of distinctions between the data needs of the 2 processes have been evaluated critically.

A SETAC technical workshop was convened to discuss how ERA and NRDA data needs and assessment processes could be more closely linked (Stahl et al. 2009). The attendees of the workshop included ERA and NRDA practitioners from the public and private sector, many of whom have been on opposite sides of contentious, even litigious, NRD cases. The workshop built upon previous efforts to enhance coordination of environmental response and natural resource restoration, including the US Department of the Interior (DOI) Natural Resource Damage Assessment and Restoration Advisory Committee and the ongoing Trustee/Industry sponsored west- and east-coast Joint Assessment Team meetings. Overall, the workshop was intended to advance the dialog among practitioners about how the processes of ERA and NRDA at hazardous sites might be coordinated better, with a goal of enhancing the efficiencies and effectiveness of analyses supporting environmental decisions.

This is the 4th paper from this workshop. Our objectives with this paper are to evaluate the technical underpinnings of recent methods used to translate measurements of ecological risk and natural resource injury into ecological service losses and to propose ways to enhance the usefulness of data obtained in ERAs to the NRDA process. Three aspects are addressed: 1) improving the linkage among ERA assessment endpoints and ecological services evaluated in the NRDA process, 2) enhancing ERA data collection and interpretation approaches to improve translation of ERA measurements in damage assessments, and 3) highlighting methods that can be used to aggregate service losses across contaminants and across natural resources. We propose that ERA and NRDA both would benefit by focusing on ecological assessment endpoints that correspond most directly to those considered in restoration and damage compensation decisions. A thesis central to this paper is that ecosystem services can be a common currency used by both processes to guide environmental decision making.

We begin by describing the concept of ecosystem services and how their adoption as assessment endpoints in ERAs will facilitate quantification of service loss in the NRDA process. Here, we build upon the USEPA's (2003) efforts to promote generic ecological assessment endpoints for ERA by suggesting development of generic ecosystem service assessment endpoints that we believe will both enhance the value of ERA to risk management and enhance the value of these data to a NRDA. After illustrating how information about risk to ecosystem service assessment endpoints can be used in NRDA, we turn our attention to issues surrounding the translation of measurement endpoints to service losses for NRDA. Consideration is given to some of the qualities desirable in ERA measurement endpoints that facilitate quantifying service loss, as well as to some of the important issues affecting the translation. Biodiversity is then offered as a key measurement endpoint, showing considerable promise for linking measurable effects to ecosystem service risk and service loss. We next consider the problem of aggregating service losses across contaminants and natural resources, offering recent case studies and approaches for aggregation. We conclude with key observations and recommendations from our workshop discussions for enhancing the use of Superfund ERA data in a NRDA.

ECOSYSTEM SERVICES AS A COMMON CURRENCY

There is growing awareness within the ecological and social science communities that improved environmental management can be achieved by considering environmental systems holistically (e.g., Di Giulio and Benson 2002). This view holds that functioning ecosystems contribute to the well-being of ecological and social components of the larger environmental system and considers humans to be an explicit part of that system (Miranda et al. 2002). Reflected in this systems perspective is the concept that the structural components and processes of intact ecosystems interact functionally to provide the support required by all life within the system. In a broad sense, the contributions of ecological systems to the vitality of human and nonhuman species alike

can be considered ecosystem services, that is, the benefits received from properly functioning ecosystems that contribute to the well-being of living organisms. Generally included in this definition is the provisioning of goods, such as food, fiber, shelter, and clean water, and the processes regulating biological productivity, material cycling, climate, and so on. Recent attention has been given to the paramount importance of ecosystem services to humans and society (e.g., Daily 1997; Daily et al. 1997; Millennium Ecosystem Assessment 2005; Stahl et al. 2007). Although the perspective taken in these discourses is decidedly anthropocentric, the notion that ecological functions produce the ecosystem services from which humans benefit reflects the implicit consideration that nonhuman species also derive benefit from functioning ecosystems. Managing the environment with this systems view in mind is likely to yield greater rewards to humans and other organisms than does a reductionist approach that focuses on individual ecological receptors or particular structural components in isolation from the larger environmental system.

The goals of the NRDA process are to return natural resources injured because of the release of hazardous substances to their uninjured or baseline condition (the condition but for the release of hazardous substances) through direct restoration or replacement of injured resources and to compensate the public for service losses occurring until those injured resources are restored. Ecological injuries are quantified in terms of the reduction in the physical, chemical, or biological services the natural resources provide, and compensation for those injuries are claimed in terms of damages (monetary) or directly as restoration actions. Damages are calculated with the use of various market and nonmarket economic techniques, and both damages and direct restoration projects are scaled to the magnitude of the injury claim.

The objectives for ERA conducted under CERCLA and similar state statutes are to identify and characterize the current and potential threats to the environment from a hazardous substance release and to identify cleanup levels that would protect those natural resources from additional adverse effects (USEPA 1997a). Although the intention of Superfund ERA is to provide information about contamination risk to societally relevant assessment endpoints (e.g., the abundance of small mammal populations), the relationships among ERA assessment endpoints and valued ecosystem services often go unstated in practice. Furthermore, insufficient attention has been given to the relationships between measurement endpoints (termed measures of exposure and effect in USEPA 1998) and ecosystem services to facilitate straightforward translation of adverse ecological effects to service losses in NRDA. Recognition and selection of ecological assessment endpoints that explicitly and more directly reflect ecosystem services should improve the value of ERA data to the NRDA process and likely will improve the societal relevance of ERA conclusions to remediation decisions.

Ecosystem service assessment endpoints

The USEPA (1998) defines an assessment endpoint to be an explicit expression of the environmental value to be protected, operationally defined as an ecological entity and its attributes. The meaning of the term ecological entity in this definition is intentionally broad, to include a species, a specific habitat, or an ecological function. For any particular site-specific ERA, assessment endpoints are identified specific to the ecology of the site and the chemical stressors present (USEPA 1997a). An example assessment endpoint for an aquatic site ERA might be benthic invertebrate community (the entity) diversity (its attribute). In this case, the ERA might consider the effects of sediment contamination on benthic invertebrate community diversity by evaluating various measurement endpoints, such as the number of species counted in benthic samples, as a function of chemical concentration in the sediment. Information about risk to this assessment endpoint would be used by site decision makers as they consider the need for sediment remediation and the options for cleanup. Ecological relevance, susceptibility to the stressor, and relevance to management goals are the key considerations when selecting assessment endpoints responsive to the needs of the decision maker (USEPA 1998). Attention to the 1st 2 of these helps to ensure the scientific credibility of the ERA; attention to the 3rd enhances the significance of assessment results to decision makers and the public.

Explicitly linking ERA assessment endpoints to data needs of the damage assessment process will enhance the likelihood that ERA data collection and analysis activities will provide information useful for both remediation and restoration decisions. The USEPA's (1997a, p. I-4) guidance for Superfund ERAs identifies valued ecological resources (i.e., entities of assessment endpoints) to include "those without which ecosystem function would be significantly impaired, those providing critical resources (e.g., habitat, fisheries), and those perceived as valuable by humans" in its interpretation of assessment endpoint, any of which should contribute to injury quantification and damage determination. In practice, the ecological entities identified in Superfund ERA assessment endpoints tend to be structural components of ecosystems. Consider, for example, the 8 assessment endpoints selected for the 2000 revised baseline ERA for the Hudson River polychlorinated biphenyls (PCBs) site in New York State (http://www.epa.gov/hudson/revisedbera-text.pdf):

- Sustainability of a benthic community structure, which is a food source for local fish and wildlife;
- Sustainability (i.e., survival, growth, and reproduction) of local fish (forage, omnivorous, and piscivorous) populations;
- Sustainability (i.e., survival, growth, and reproduction) of local insectivorous bird populations;
- Sustainability (i.e., survival, growth, and reproduction) of local waterfowl populations;
- Sustainability (i.e., survival, growth, and reproduction) of local piscivorous bird populations;
- Sustainability (i.e., survival, growth, and reproduction) of local insectivorous mammal populations;
- Sustainability (i.e., survival, growth, and reproduction) of local omnivorous mammal populations; and
- Sustainability (i.e., survival, growth, and reproduction) of local piscivorous and semipiscivorous mammal populations.

Although reflecting the interests and values of the parties involved, all of these assessment endpoints describe structural components of the Hudson River ecosystem, and only the 1st (benthic community structure) is linked explicitly in its statement to an ecosystem service (food source for fish and

wildlife) as defined here. Data describing impacts to structural components of ecosystems can be used to identify and quantify natural resource injury and determine monetary damages or restoration requirements. Assessing damages can be fairly straightforward when those components are traded as goods in markets (albeit not without philosophical controversy; see White 1990), such as with some of the fish species included in the 2nd assessment endpoint above. However, quantifying damages in monetary terms is not so straightforward when no markets exist for the injured resource or the ecosystem services they provide. Developing and scaling a damage claim or restoration project on the basis of information from ERAs that are only loosely or indirectly linked to ecosystem services becomes particularly problematic.

Translations between ERA and NRDA could be more straightforward if ERA assessment endpoints were couched explicitly in terms of ecosystem services. With ecosystem services specifically in mind, generic ecological assessment endpoints (GEAEs) could be identified that can be tailored to the decision support needs of individual sites. The GEAEs are broadly described assessment endpoints (e.g., abundance of an assessment population) that can be applicable in a variety of environmental management contexts (USEPA 2003; Suter et al. 2004). The USEPA (2003) developed an initial set of 15 GEAEs to help guide planning of the ecological risk assessments that support the array of the Agency's environmental protection decisions, including those of Superfund. The GEAEs in this set were selected after consideration of their usefulness in informing USEPA decisions, the practicality of their measurement, and the clarity with which they can be defined. Several, if not all, of the GEAEs in this initial set already appear to be responsive to the needs of NRDA (also see Gala et al. 2009). Importantly, USEPA (2003) describes the relationships between the individual GEAEs and several of the environmental values that the public ascribes to ecological entities and functions. Having this relationship well described is particularly relevant to the translation questions of concern here, because linking assessment endpoints to public values can help identify economic methods appropriate for monetary damage determinations.

The USEPA (2003) encourages development of additional GEAEs to enhance their coverage of assessment scenarios. We recommend that NRDA and ERA practitioners jointly review the initial set of GEAEs to identify those best suited to serve as generic ecosystem service assessment endpoints and to specify other GEAEs that could enhance translation of ecological risk estimates to ecosystem service losses. Nationally, a team of ecological risk assessors, Trustees, regional Biological Technical Assistance Group (BTAG) members, and other stakeholders could be convened to expand the list of GEAEs to include those particularly responsive to the needs of NRDA at local and national scales. An explicit focus on ecosystem service assessment endpoints (ESAEs) in ERA is consistent with the increasing emphasis on the role of ecosystem services in environmental management decisions (e.g., Daily et al. 1997; Millennium Ecosystem Assessment 2005; Dale et al. 2008) and thus should increase the value of assessment results to decision making more generally. A similar recommendation was made by USEPA (2006) for development of generic endpoints that encompass key ecosystem goods and services for routine consideration in the ecological benefits assessments that support benefit–cost analyses of environmental policy and regulation.

Using ecosystem service assessment endpoints to inform NRDA

Two approaches that are employed in NRDA illustrate how ERAs that focus on ESAEs can inform restoration and compensation decisions directly. The 1st, habitat equivalency analysis (HEA), is a method used to determine the appropriate type and scale of compensation for loss of natural resource habitats and the ecological services they provide (see Unsworth and Bishop 1994; Dunford et al. 2004; NOAA 2006). The principal concept underlying HEA is that the public can be compensated for service losses through habitat replacement or restoration projects that provide resources and services of the same or appropriately similar type as were lost. The HEA addresses differences in the types and levels of services provided by a habitat before injury and after restoration and provides a framework for scaling restoration projects to account for any differences. Scaling considerations include interim service losses or gains that occur in the time interval between injury and recovery to the baseline conditions. In practice, future service gains and losses are discounted on the basis of the economic theory that consumers prefer to use their commodities, in this case the services provided by natural resources, in the present rather than at some time in the future. Thus, future service gains or losses are discounted to reflect their present worth, and the results of HEAs are discussed in terms of discounted service acre years (DSAYs), discounted stream mile years, and so on (see NOAA 1999 for a complete description of discounting).

The ERAs that are focused on the ecosystem services provided by functioning habitats can have greater value to HEA-based NRDAs than do those focused on more traditional assessment endpoints. An ESAE described in the form of a habitat type, say a wetland (the entity), and services such as biological productivity or nutrient retention (the attributes), is likely to concentrate ERA analysis activities on providing the data needed to characterize risk to habitat services in a manner that is more integrated than would be assessment endpoints that describe structural elements of the system in isolation. Because the needs of the 2 assessments are similar, ERA measurements of adverse impacts to those services would inform quantification of service flow reductions in a HEA-based NRDA directly. The comparability of endpoints of the 2 assessment processes, together with the more integrated nature of ESAEs, can help overcome some of the difficulties associated with aggregation described later in this paper.

The 2nd NRDA approach discussed here, resource equivalency analysis (REA), is used to scale the injury when it primarily involves 1 or more natural resource species rather than a habitat. In REA, the injury typically is measured in terms of number of individuals killed or loss of reproductive capacity. Data on life history characteristics of the resource, such as survival rate, average life expectancy, average reproductive rates, age of injured/killed individuals, etc., are used to estimate the total impact of the injury. Like HEA, the economic model behind REA calculates the present value of the injured resource (service flow losses) and the restored resource (service flow gains). Instead of calculating DSAYs of injury, however, the REA model calculates lost organism years, which is an integration of the injury to the resource over time on the basis of basic life history characteristics. The REA estimates the difference between 2 population trajectories for the injured species: the trajectory for the population that would have occurred without the injury and one that

estimates the population trajectory for the injured population. The difference between these 2 trajectories often is represented as discounted lost organism years. Restoration projects can then be scaled to provide an equivalent replacement of the estimated discounted lost organism years or habitat or habitat improvements that will allow the species to reproduce naturally in sufficient numbers to compensate for the lost organism years. The HEA can be used to scale injuries to a single biotic resource by translating those injuries to a habitat loss, but REA provides a more direct measurement of loss when individual species are injured. Additional discussion on the development and application of REA in the NRDA context can be found in Donlan et al. (2003), McCay et al. (2004), and the damage assessment and restoration plan for the Luckenbach incident (CADFG 2006).

The resource species on which REA focuses can be thought of as goods from the ecosystem services perspective. And in many regards, ESAEs describing the attributes of such goods would be similar to traditional assessment endpoints like most of those selected for the Hudson River PCBs site listed above. With ESAEs articulated at appropriate levels of biological organization (specifically, population and community levels), ERA analysis activities would be better positioned to provide the information needed directly by NRDA to quantify injury and service flow reductions associated with resource species. When viewed from a community perspective, the adverse impacts to resource species measured in ERA can be considered in NRDA in the context of other resource species and their functional relationships. Furthermore, the data and models developed for the ERA could be directly applicable to calculation of service flow gains over the time period of natural resource restoration and recovery, if practicable. Additionally, careful framing of the ESAE can add value to observations of bioaccumulation and tissue contamination at sites—notoriously challenging measures to interpret in ERA in terms of adverse impact—because these data can be considered in terms of lost ecosystem goods when contamination of food stocks is known to be deleterious.

TRANSLATING MEASUREMENT ENDPOINTS TO ECOSYSTEM SERVICE LOSSES

In some cases, risks to assessment endpoints cannot be assessed directly in an ERA and must be inferred from changes in measurement endpoints (measures of exposure and effect) used as surrogates. This situation is likely to persist even with a focus on ESAEs. In NRDA, baseline and lost services are often estimated from data obtained in the ERA, but the linkages between measurement endpoints and service endpoints can be tenuous. Thus, both processes will be served by continued attention to improving the translational linkages among measurement endpoints and ecosystem services. In this section, we consider some of the key issues affecting translation of ERA measurement endpoints to ecosystem service losses and how the translations might be improved. We conclude the section by promoting biodiversity as a measurement endpoint with inherent linkages to ESAEs.

Comparability of data needs of ERA and NRDA

Ecological risk assessment and NRDA have different roles in the management of hazardous sites, but in many regards, they have similar informational requirements. Both assessment processes require data describing exposure pathways, environmental exposure concentrations, the toxicity of chemicals and the effects associated with exposure. Although there are limitations to the direct use of some data collected for ERA in NRDA (Gala et al. 2009), much of the raw data generated during ERA likely can prove useful in an injury assessment. For instance, both the ERA and NRDA likely would be informed by data from sediment samples regarding exposure concentrations. Focusing on the commonalities in data requirements between the 2 assessment processes might provide an opportunity for developing an integrated data collection program at hazardous sites.

Despite the commonalities that exist, NRDA has several unique data requirements for which data developed to evaluate risk to assessment endpoints (i.e., measure endpoints) often are insufficient, including the extent of temporal and spatial scale of contamination and the nature of the stressors evaluated. For example, baseline ecological risk assessments focus on estimating risks associated with current conditions at the site, whereas Trustees working on NRDA cases are, by statute, permitted to seek damages for past injuries resulting from a chemical release as well as for future injuries that likely will occur until the injured resources return to baseline conditions. In addition, loss of ecological services associated with remedial activities and the implementation of the remedy is also compensable under NRD statutes. Postremedy monitoring or confirmation data obtained in the remedial process likely will not be adequate to quantify future losses of ecological services resulting from residual contamination or from remedial activities. Furthermore, the focus of information gathering for a hazardous site ERA is most often restricted to a well-defined area, one that is limited by regulatory or policy considerations. Natural Resource Damage Assessment investigations can extend to wherever the site contamination has resulted in natural resource injury, which could be well beyond the boundaries of the Superfund site. For example, investigations of locations with historical levels of contamination that attenuated over time, or of widely ranging receptors such as birds, likely would be omitted from an ERA but might be part of the NRDA data needs. Finally, information usually is not collected in remedial investigations about alterations to habitat and the presence of stressors other than chemicals that might be affecting natural resources or the services they provide. In contrast, in the NRDA process, these types of information often form the basis for establishing baseline conditions at a site.

Characteristics of broadly valuable measurement endpoints

From the standpoint of NRDA, some types of data obtained in Superfund ERAs are more useful than are others. Because much has been said about characteristics of measurement endpoints desirable from the standpoint of their use in ERA (e.g., USEPA 1998), here we consider some key issues relative to applying ERA measurement endpoints to the NRDA process.

Natural resource species as endpoint entities—The relationship between measurement endpoints and ESAEs is inherently uncertain. One of the most important challenges is to identify the natural resource species that are most likely to influence the ecosystem processes and functions that determine ecosystem services. For example, it is highly unlikely that species loss from contaminated ecosystems is a random process. The susceptibility of a species to contaminants and the likelihood of local extinction are influenced by a wide

range of species traits, including mobility, longevity, reproductive rates and body size, and species-specific susceptibility to the type and concentration of the contaminant (Raffaelli 2004; Solan et al. 2004; Bunker et al. 2005). Species traits also modify resource dynamics, trophic structure, and disturbance regimes and therefore will influence the relationship between biodiversity and ecosystem processes (Chapin et al. 1997). Raffaelli (2004) provides a conceptual model to show how species traits that determine vulnerability to anthropogenic stressors vary among trophic levels. This model could be used to predict which species are most likely to be eliminated from an ecosystem and the potential cascading effects on ecosystem processes.

Levels of biological organization—The appropriate level of biological organization for assessing effects of contaminants has seen significant discussion in the ecotoxicological literature (e.g., Adams et al. 1992; Clements and Kiffney 1994; Clements and Newman 2002; Barnthouse et al. 2007). In general, the level of biological hierarchy examined is inversely related to the degree of mechanistic understanding of stressor effects and causation. However, responses at higher levels of biological organization are more ecologically meaningful and, when established within the context of NRDA, typically lead to larger damage claims. Because of the increasing complexity and cost of trying to understand and establish cause and effect relationships between a particular contaminant and higher levels of biological organization, most ERAs and NRDAs tend to focus on establishing mechanistic relationships at lower levels. If such a relationship can be established, then further work might be conducted to establish the larger ecological importance of that lower level effect. In Figure 1, we present 3 examples in which responses at lower levels of biological organization are directly or indirectly linked to ecosystem processes. Elevated levels of PCBs in migrating salmon can result in reduced reproductive success, lower population density, and fewer salmon returning to their native streams. Lower numbers of returning salmon can have significant consequences for nitrogen export to adjacent riparian and terrestrial ecosystems (Naiman et al. 2002). Mayflies can be an important seasonal food item for many aquatic and riparian stream species. Reduced genetic diversity of mayflies in a metal-polluted stream increased the susceptibility of these insects to novel stressors (e.g., acidification, ultraviolet-B radiation) and resulted in lower ecosystem resilience (Clements 1999; Courtney and Clements 2000; Kashian et al. 2007). Finally, numerous studies have demonstrated a direct relationship between species diversity and primary production in plant communities (see review by Hooper et al. 2005). Contamination can cause local extirpation of species, thereby reducing local species diversity and primary production. Each of these examples includes a measurement endpoint that would be appropriate for an ERA. Each measurement endpoint is also associated with an important ecosystem process. Although it is true that measurements of higher levels of biological organization (e.g., species diversity and community composition) can be directly linked to ecosystem processes, the above examples show it is also possible to make this link with measurements at lower levels. We suggest that ERA investigations could further benefit NRDAs by carefully selecting the lower level relationships examined in risk determinations. By thoughtfully selecting those species that might provide a closer link to ecosystem services, the ERA would produce a more robust understanding of risk in relation to the needs of remediation decisions and provide data of high value to the NRDA process.

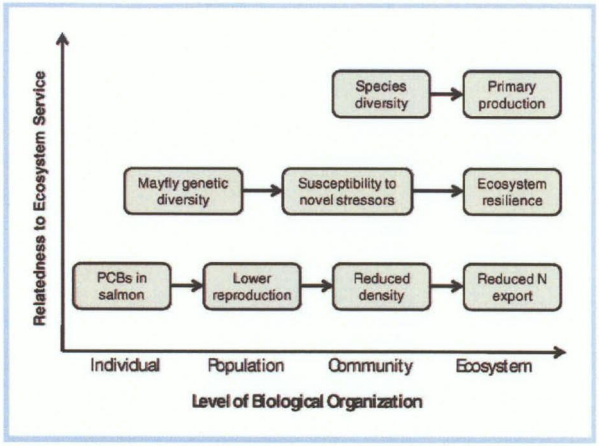

Figure 1. The relationship between ecological risk assessment (ERA) measurement endpoints at different levels of biological organization and ecosystem processes.

Treatment of toxicity data—Studies conducted to evaluate changes in measurement endpoints (e.g., toxicity, behavioral, genomic, or field studies) are often designed to determine a given statistical endpoint or a discrete effects threshold. Test groups of animals are exposed to different concentrations of chemicals, and different effects, such as survival, growth, or reproduction, are monitored. A statistically defined no-observed-effect concentration (NOEC) typically is calculated from these tests. Such statistics are used commonly in screening-level hazard quotient assessments but have limited value for quantitative risk assessment or NRDA purposes. They do not support spatial–temporal evaluation, nor do they provide a means to assess the extent and severity of injury. The use of NOECs has been severely criticized on statistical grounds (Laskowski 1995; Suter 1996; Van der Hoeven et al. 1997), and it has been concluded that the use of NOEC values should be abandoned (OECD 2006). The proposed alternative is to use methods designed to produce continuous data, such that exposure–response and other types of continuous variable data relationships can be developed. This approach can be used for lethal, sublethal, behavioral, genomic, and many other types of toxicity tests. The use of the entire exposure–response range allows calculation of an effect level associated with any given exposure concentration (EC_x). Values of EC_x depend on the exposure time (Jager et al. 2006), and EC_x values decrease asymptotically with increasing exposure time because time is needed for internal concentrations to maximize at the target organ.

The use of continuous data test designs is not limited to toxicity studies but can be applied to other situations in which population assessments are made or biodiversity is measured. In these situations, it is important to select study sites that allow for exposures across a range of concentrations. Examples of such analyses include Adams et al. (2003), Ohlenforf (2003), and Beckon et al. (2008) on the effects of selenium on mallard duck egg teratogenesis. Well-designed studies of survival, reproduction, and other endpoints also can be used to predict the effects on wild populations (Hallam et al. 1989; Kooijman 1997) and likely would be useful for assessing the extent of injury and scaling restoration. We highly recommend test designs that result in continuous as

opposed to discrete data sets to translate measurement endpoints to service loss.

Facilitating translation with data quality objectives

Application of a data quality objectives (DQO) process (e.g., USEPA 1994, 2000a, 2000b) can help ensure that information obtained in a site ERA also is compatible with the needs of the NRDA. A DQO process is a strategic planning approach based on the scientific method to prepare for a data collection activity. It provides a systematic procedure for defining the criteria that a data collection design should satisfy, including when to collect samples, where to collect samples, the tolerable level of decision error for the study, how many samples to collect, how the data will be interpreted, and attempts to balance risk and cost in an acceptable manner. In addition, the process will guard against committing resources to data collection efforts that do not support a defensible decision. The DQO process can be viewed as a means to bring disparate parties or stakeholders together to achieve a common objective with a common data set and decision criteria. The use of a DQO process leads to a robust set of data, decision criteria, and analysis output that allows for effective collection and assessment of data for both ERA and NRDA purposes.

Uncertainty in translation

Environmental management decisions typically are made within an analytical framework that includes varying degrees of uncertainty. Lack of data, extrapolation, variability within natural systems, and measurement precision are common sources of uncertainty that often impinges upon the decision-making process. The USEPA promotes the evaluation of uncertainty within ecological risk assessment and has issued a variety of policies and guidelines outlining methods for qualitative and quantitative consideration of uncertainty (e.g., USEPA 1997b, 1997c). In addition, a previous Pellston Workshop developed guidance for evaluating uncertainty in ERA (Warren-Hicks and Moore 1995). Within NRDA, Trustees commonly conduct uncertainty evaluations to support the development of injury estimates and restoration requirements.

Explicitly addressing uncertainty can substantially improve the range of options available for defining the scale of remediation and restoration. Analyses that present estimates of variance and ranges of plausible parameter estimates can characterize uncertainty and identify issues worthy of additional review or discussion. For example, it is often possible to identify factors that have a high degree of uncertainty but also have few implications for risk management decisions or damage calculations. Uncertainty analysis also can be used to define bounds on parameter estimates. These bounds might overlap with estimates developed by other parties, thereby creating an opportunity to build consensus on the basis of the uncertainty. Often, this approach is manifested through negotiation of exposure and effect scenarios that frame uncertainty within the study's data quality objectives (e.g., reasonable worst case scenario, 95% confidence interval, etc.).

In HEA, uncertainty often manifests in the translation of measurement endpoints into service losses. For example, laboratory studies for a single species of fish might correlate increasingly severe biological effects to increasing contaminant concentrations in sediment. The HEA practitioner might translate this series of data into a service loss function reflecting the degree of impairment observed across the range of contaminant concentrations observed at the site. Furthermore, these results might be applied to other fish species within the affected system. Unfortunately, defining specific service losses in this way has the potential to overstate the precision of the translation. Conducting bounding analyses on the laboratory-defined effect concentrations and the associated estimate of service loss will improve understanding of the range of uncertainty associated with the injury estimate, leading to better informed restoration decisions.

Whether qualitative or quantitative, expressing uncertainty when evaluating changes in ecosystem services can enhance environmental decision making. By expressing the degree of uncertainty associated with key factors, decision makers and analysts are more likely to focus on the issues of greatest relevance and eliminate factors that have little or no bearing on remediation or restoration decisions. In doing so, evaluations that express changes in ecosystem services offer a richer understanding of the range of likely effects and identify research opportunities that will ultimately reduce uncertainty in future assessments.

Biodiversity as a measure of ecosystem services

Measures of biological diversity are frequently included as endpoints in ERAs because of their perceived importance to ecosystems and society. Indeed, evidence is increasing that biodiversity directly influences the flows of ecosystem services. High species diversity maximizes resource acquisition across trophic levels and reduces the risk associated with stochastic changes in environmental conditions (Chapin et al. 1998). Conservation biologists have used the positive relationship between species richness (a measure of diversity) and ecosystem function to argue for greater species protection. The relationship between diversity and ecosystem processes is emerging as a fundamental concept in contemporary ecology. Although the specific shape of this relationship and its underlying mechanisms vary (Hooper et al. 2005), scientists and policymakers alike recognize the critical importance that species play in providing the goods and services that are essential for human welfare.

Here, we define biodiversity broadly to include aspects of genetic, species, and functional diversity within the spatial context of analysis. The positive relationship between species diversity and ecosystem function has been demonstrated in small-scale microcosms (Heemsbergen et al. 2004), marine tide pools (Bracken et al. 2008), large-scale field experiments (Tilman et al. 1997; Hector et al. 1999), and at a continental-global scale (Worm et al. 2006). The basic argument supporting this relationship is that greater species richness increases the likelihood that functionally important species will be present in an ecosystem. If we assume that these species have different functional roles and that the functions performed by any single species is limited, it follows that elimination of species will affect ecosystem processes. There is also evidence that greater diversity increases the resistance and resilience of ecosystems to anthropogenic perturbations (Frost et al. 1999). Most research on the diversity–ecosystem function relationship has focused on primary productivity, and the underlying mechanisms responsible for this relationship are generally well understood. Ecosystems with more species likely will use available resources more efficiently, resulting in greater primary productivity. In addition to productivity, a broad consensus within the scientific commu-

Table 1. Examples of ecosystem services that are directly related to species richness and diversity. Translation results were estimated on the basis of inspection of the relationships depicted in the original paper without considering uncertainty

Ecosystem service	Location and habitat type	Relationship	Translation	Reference
Primary productivity	Minnesota (USA) Grassland	Curvilinear	93% reduction in richness → 59% reduction in biomass	Tillman et al. (1997)
Productivity	8 European grasslands	Linear, log-linear	67% reduction in functional groups → 33% reduction in biomass	Hector et al. (1999)
Nitrogen uptake	California (US) grassland	Curvilinear	75% reduction in functional groups → 50% reduction in N uptake	Hooper and Vitousek (1997)
Decomposition and soil respiration	Soil microcosms	Linear	67% decrease in functional dissimilarity → 10% decrease in effect	Heemsberger et al. (2004)
Fish production	Open marine	Linear	71% reduction in richness → 80% reduction in average catch	Worm et al. (2006)
Nitrogen uptake	Marine tide pools	Linear	55% reduction in richness → 46% reduction in N uptake	Bracken et al. (2008)
Bioturbation	Marine benthic	Linear	99% reduction in density → 99% reduction in bioturbation	Solan et al. (2004)
Pollination	British fields	Unknown	60%–90% of species showed reduction in trait → 22% reduction in obligatory insect pollinated plants	Biesmeijer et al. (2006)

nity now is that species richness and functional diversity directly regulate many other ecological processes (Hooper et al. 2005), including nutrient dynamics, decomposition, soil respiration, and pollination (Table 1). Species loss within functionally related assemblages, such as pollinators and flowering plants, can affect ecosystem services at very large spatial scales (Biesmeijer et al. 2006).

Most studies investigating the relationship between diversity and ecosystem processes focus on a single trophic level; this relationship will certainly be more complex in systems with multiple trophic levels. Removal of species occupying higher trophic levels will have very different consequences for ecosystem processes compared with the loss of primary-level consumers. For example, species richness decreases at higher trophic levels and top predators are often more susceptible to anthropogenic disturbances. Consequently, an understanding of food web structure is necessary to predict the consequences of species loss on ecosystem function (Petchey et al. 2004). In systems regulated by top-down trophic interactions, removal of species at higher trophic levels would be expected to have greater effects (Downing and Leibold 2002).

Failure to consider the consequences of ordered compared with random species losses might cause analysts to underestimate the effects of species extinction on ecosystem function (Zavaleta and Hulvey 2004). Solan et al. (2004) compared the effects of species loss on ecosystem processes in marine sediments under random and nonrandom species extinction models. Removal of abundant, large, and highly mobile marine invertebrates had a much greater effect on ecosystem processes than did removal of smaller, less abundant species. Model simulations based on random and nonrandom extinction scenarios showed that the effects of species extinction on carbon storage were strongly influenced by the order in which species were removed (Bunker et al. 2005).

A good understanding of the underlying shape of the diversity–ecosystem function relationship is needed to translate loss of species diversity to reduced ecosystem services. Linear, curvilinear and threshold increases in ecosystem processes as a function of species diversity have very different implications (Figure 2). A linear relationship between ecosystem function and species diversity implies that all species are important and contribute equally to ecosystem processes (Figure 2A). A curvilinear relationship implies that some species are more important than others and that ecosystems could potentially loose a significant number of species without affecting function (Figure 2B). In a threshold functional relationship, ecosystem processes remain relatively saturated until species richness is reduced to a critical level,

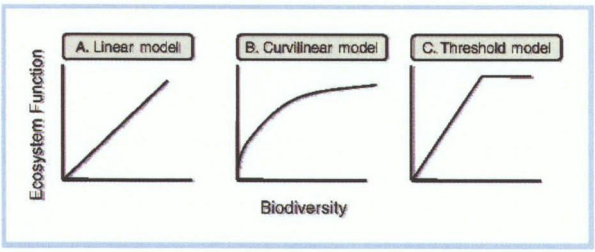

Figure 2. Linear (**A**), curvilinear (**B**), and threshold (**C**) relationships between biodiversity and ecosystem function.

causing a rapid decrease in ecosystem function (Figure 2C). Near this point, small changes in species diversity can produce large effects on ecosystem services. From a conservation biology perspective, a threshold relationship is probably of the most concern and forms the basis of the "rivet hypothesis" in ecology (Walker 1995). Similar to the rivets that attach wings to a plane, ecosystems are relatively resilient to species loss until some critical species (or rivet) is removed, causing catastrophic failure. Characterizing the nature of the relationship between diversity and ecosystem function and identifying the existence and location of any threshold would be useful for predicting ecosystem responses to species loss.

Relatively few studies have attempted to quantify the relative frequency of linear, curvilinear, or threshold relationships between diversity and ecosystem function. The examples shown in Table 1 include linear and nonlinear relationships. Hooper et al. (2005) concluded that the saturating response of ecosystem processes to increasing species richness was the most common pattern. However, Worm et al. (2006) found no evidence of functional redundancy in their global analysis of marine fisheries. An inconsistency obviously exists between the hypothesis that all species in an ecosystem are important and the alternative that ecosystems with a large number of species have significant functional redundancy. This inconsistency can possibly be resolved by considering functional traits of species instead of simple measures of species richness (Chapin et al. 1997; Heemsbergen et al. 2004). Indeed, some have argued that functional group diversity is a better predictor of ecosystem processes than is simple species diversity (Hooper and Vitousek et al. 1997; Tilman et al. 1997; Hooper et al. 2005). Regardless, these data strongly suggest a direct, quantitative relationship between species diversity and ecosystem processes.

We propose that measures of biodiversity can provide valuable insights about the risks to ESAEs and the service losses associated with contamination at hazardous sites. Although specific relationships between diversity and many ecosystem services remain to be described quantitatively, and recognizing that comprehensive studies to determine those relations are unlikely to be undertaken in most ERAs and NRDAs on a site-specific basis, the information provided in the studies cited above can form the foundation for reasonable translations. Additionally, high biodiversity has inherent aesthetic and cultural importance to some societies, facilitating quantification of the value of service losses and gains. We recommend that research attention be given to refining measures of biodiversity and their quantitative relationships with ESAEs for standard use in ERA and NRDA.

AGGREGATING SERVICE LOSSES

The NRDA attempts to consider the full range of injuries and service losses associated with site contamination. To ensure the comprehensive determination of damages, losses associated with multiple contaminants or involving multiple natural resources must be aggregated in ways that avoid under- or overestimation of those damages. The selection of aggregation approaches is often intertwined with the selection of a translation metric or metrics for relating measurement endpoints to service losses. Here, we review some of the approaches that can be used to aggregate service losses across multiple contaminants and across multiple resources. We begin by describing some recent case studies in which the aggregation problem is viewed as having been resolved successfully. These case studies also provide examples of how several measurement endpoints have been translated into service losses.

Recent case studies

Hylebos Waterway—The Hylebos Waterway in Commencement Bay, Washington, USA, is an industrial waterway contaminated with a wide range of organic and inorganic compounds. The waterway provides habitat for a range of species, including birds, resident and anadromous fish, shellfish, and benthic infauna (Commencement Bay Natural Resource Trustees 1991). To facilitate discussion regarding restoration of natural resources, the Trustees developed a HEA that assimilates impacts across contaminants and affected organisms. The Hylebos Waterway HEA offers 1 approach for translating contaminant impacts into service losses for selected species and then expressing these impacts on a habitat basis.

The underlying premise of the Hylebos Waterway HEA is that habitat is the appropriate currency for evaluating ecosystem function. To derive measures of habitat impacts, the Trustees evaluated contaminant-related injuries to the resource species that use the waterway by relating impacts to the degree of sediment contamination. This was accomplished by:

1. Dividing the waterway into a series of polygons and determining the habitat type and sediment contaminant concentrations in each polygon.
2. Assigning a habitat value to each polygon reflecting the baseline condition of the area and its ecological functions (e.g., as breeding habitat) related to juvenile Chinook salmon, juvenile English sole, and 4 bird assemblages.
3. Arraying published sediment effect thresholds for aquatic organisms for each contaminant or class of contaminants by concentration.
4. Assigning service losses on the basis of the expected severity of impact.
5. Determining for each polygon the service loss associated with each contaminant.
6. Aggregating service losses across contaminants to derive a single measure of service loss for all aquatic organisms in each polygon.
7. Calculating the service loss associated with each polygon in a given year by multiplying the aggregated service loss for aquatic organisms by the baseline habitat value.

Within this process are 3 key translations. First, the Trustees derived habitat values on the basis of the interaction of selected species with their habitats. However, it was necessary to translate each species–habitat combination into an aggregate measure of habitat value. The Trustees developed the aggregate value by weighting the individual scores for Chinook salmon by 50%, English sole by 25%, and the 4 bird assemblages by 25%. The increased weight for salmon in this application was based on the Chinook's status as a threatened species under the Endangered Species Act and on regional interest in restoration of the species (Commencement Bay Natural Resource Trustees 2002). The 2nd translation involved mapping the concentration of each contaminant to a service loss for aquatic organisms. This process was transparent and facilitated discussion among parties or highlighted opportunities to relate service losses quantitatively to empirically derived measurement endpoints. Finally, the Trustees translated the effects associated with individual contaminants into a single, combined measure of

effect on aquatic organisms. This was accomplished through the concept of residual service loss. This concept expresses the effects of each contaminant in proportion to the sum of the service loss for all contaminants, wherein total service loss cannot exceed 100% of the habitat value. A complete description of the approaches used for all 3 translations is given by Commencement Bay Natural Resource Trustees (2002).

Lavaca Bay—Trustees worked cooperatively with Alcoa in Lavaca Bay, Texas, USA, to determine injuries to natural resources and resource services resulting from mercury and polycyclic aromatic hydrocarbon (PAH) releases from the Alcoa Point Comfort facility. A HEA framework was used to quantify service losses by habitat type. Using data from the RI/FS process, Trustees and Alcoa identified habitat types (such as emergent marsh, oyster reef, unvegetated subtidal soft bay bottom) and associated natural resources that had the highest potential to have been injured. Injuries to these habitats from contamination (and response actions) were quantified as degree of injury to key resource categories, including benthic invertebrates, finfish/motile shellfish (hereinafter referred to as "fish"), and birds, which were assumed to have suffered lethal (increased mortality) and sublethal (decreased fecundity, reduced growth, etc.) effects as a result of exposure to mercury or PAHs. A full description of the Lavaca Bay injury determination and restoration scaling is given at http://www.darrp.noaa.gov/southeast/lavacabay/admin.html.

This assessment was conducted with the use of a reasonable worst case (RWC) approach. The Trustees and Alcoa entered into a Memorandum of Understanding that specifically agreed to use data from the RI/FS to the maximum extent possible to determine natural resource injuries. Under the RWC approach, the Trustees agreed that before proceeding to plan and implement specific injury determination studies, the Trustees and Alcoa would consider existing data related to the affected area and the potentially affected resources. This included data from the RI/FS, historical data and results of scientific studies, and published literature reviews. With the use of this information, injury determinations were made by erring on the side of conservatism; that is, resource injury for an exposure level was assumed when at least 1 data source indicated adverse effects were reasonably likely. This approach is well suited for a cooperative assessment.

In the Lavaca Bay case, the cooperating parties evaluated site-specific sediment and tissue concentrations, compared these concentrations to threshold levels developed from onsite studies and the literature, and then determined service losses. The degrees of service losses were based on the type and severity of impacts associated with the measured tissue concentration ranges. Injury levels generally increased with increasing contaminant concentration, although no direct quantitative relationship was identified between effect and concentration. Specific assessments of service losses associated with 2 resource groups are highlighted below.

Benthic resource ecosystem services were identified as primarily relating to food production, decomposition, and energy cycling, which affect nearly all organisms within an estuarine system. It was assumed that impacts to benthic resources had the potential to impact biota in nearly all trophic levels. A goal of the assessment was to develop contamination concentration benchmarks for Hg and PAHs that are known or suspected injury thresholds for benthic resources on the basis of results from the RI/FS and general scientific literature. Data used from the RI/FS process included 1) site-specific chemistry to determine the nature and extent of PAH and Hg contamination in Lavaca Bay sediments (some additional NRDA-specific chemistry samples were collected to further refine the contamination characterization for PAHs); 2) laboratory bioassays and benthic macroinvertebrate studies (sediment quality triad) to determine relationships between mercury concentrations in field sediments and observed effects on survival, growth, and reproduction in benthic populations; and 3) habitat mapping that identified specific habitats important for benthos. Interim service losses were quantified on the basis of combinations of Hg and PAH concentration ranges and resulted in different levels of service reductions. The Trustees assumed the injuries resulting from Hg and PAHs were additive and assigned a level of injury, expressed as percent service loss, for each concentration range. The number of affected acres of benthic habitat at each injury level was determined through habitat mapping and contaminant sampling. This information was applied in the HEA to quantify total benthic injury.

The primary ecological services provided by fish in Lavaca Bay were identified to be food production for higher trophic levels and energy cycling. Injuries to fish were assumed to occur through direct exposure to Hg in sediments and surface waters and through ingestion of contaminated prey. Tissue data for fish and prey items collected as part of the RI/FS process, combined with literature studies that linked mercury tissue levels and adverse impacts, were evaluated with the use of a site-specific food web model. The food web model was designed to use selected species to represent major feeding guilds in Lavaca Bay. Similar to the benthic injury assessment approach, the Trustees and Alcoa used differing concentration ranges of Hg in fish tissues to derive the level of injury in fish. For each range of tissue concentrations, the Trustees determined a level of injury severity corresponding to service reduction percentage. The severity of adverse impacts to fish generally increased with increasing levels of fish tissue contamination. For ease of translating the service gains and losses in an HEA, injury to fish was determined on the basis of critical tissue concentrations as modeled from contaminated fringing marsh, vegetated and unvegetated, and oyster reef habitats (Evans and Engle 1994). Modeling was conducted as part of the RI process and applied to the injury determination. This allowed mapping of injured areas within Lavaca Bay on the basis of sediment Hg concentrations, which were associated with fish injury through modeling.

Southeast Texas sediment site—Sediment quality guidelines were used by Trustees to estimate losses of ecological services from the cumulative effects of PAHs and metals in intertidal sediments at a corrective action site in southeast Texas. Loss calculations were based on the probability of toxicity to marine amphipods according to the model developed by Long et al. (1998), which evaluates the incidence and magnitude of toxicity in sediments on the basis of the results of a 10-d toxicity test with marine amphipods. Mean effects range median quotients (Mean ERM-Qs) were developed for each sample by calculating the average of the ratios between the concentration of individual contaminants in sediment samples and their respective ERM values. The ERM values are numerical guidelines that are suggestive of adverse effects to sediment-dwelling organisms from exposure and bioaccumulation (Long et al. 1995). Adverse biological effects are highly probable at contaminant concentrations above the ERM. The

Trustees assumed that the sediment contaminants were available to sediment-ingesting organisms, and the Mean ERM-Q values for each location were then compared with the ranges of predicted toxicity established by Long et al. (1998). A direct translation was made between losses of ecological services provided by intertidal sediments and the predicted toxicity to marine amphipods. Sediments in locations with Mean ERM-Qs between 0.11 and 0.5, between 0.51 and 1.5, and greater than 1.5 were assigned service losses of 30%, 46%, and 74%, respectively, consistent with the predicted range of toxicities established by Long et al. (1998). The spatial extent of areas that contained Mean ERM-Qs within each of these ranges was then calculated.

Addressing multiple contaminants and natural resources

The primary goal for translating responses of ERA measurement endpoints to measures of service loss for an NRDA is to enable the Trustees to scale the amounts and types of restoration projects needed or damages assessed. In the simplest case, the effects of 1 contaminant on 1 resource species drive both the risk and damage assessments (e.g., effects of DDT on bald eagles). In such a case, a single translation from a measurement endpoint to a percent service loss can be relatively straightforward, and restoration projects can be scaled to that percent service loss. However, at most sites, multiple contaminants and multiple natural resources (e.g., species, guilds, communities, and habitat types) are present and interact. The degree of injury usually varies on the basis of individual and species-specific sensitivities to the contaminants and the varying concentrations of contaminants and times of exposure. To address this reality, service losses typically are translated into damages or restoration by aggregating across contaminants and across natural resources and developing a single or a few service loss translation metrics, or by aggregating across multiple service loss categories to produce the translation metrics. Each approach has advantages and disadvantages that should be considered on a site-specific basis.

Aggregating across contaminants—Several aggregation methods are possible when natural resources are exposed to multiple contaminants at a site. The measurement endpoint itself can be used to address a suite of contaminants. For example, a decrease in benthic invertebrate community diversity at a site relative to an appropriate reference site or a decrease in growth of test organisms in a sediment toxicity test could be used to quantify injury to the benthic community from a mixture of chemicals. Selection of these types of measurement endpoints for the ERA simplifies the translation to service losses.

Toxic equivalency approaches can be used to aggregate the effects of chemicals, especially for sites at which direct impacts to biota are not measured but are estimated by comparing concentrations of contaminants in abiotic media or tissues to effects levels from the literature. An assumption of additive toxicity has been used when the chemicals of concern share a common mechanism of action. This has been used most commonly at sites involving PCBs and other contaminants exhibiting Ah receptor–mediated toxicity and is the recommended approach for evaluating ecological risk from mixtures of PCBs, polychlorinated dibenzodioxins, and polychlorinated dibenzofurans (USEPA 2008). At sites with toxicologically dissimilar chemicals present, one possibility is to assume additivity, but this assumption should be evaluated as part of the uncertainty analysis. To illustrate, consider a situation in which the percent losses in reproduction expected from site concentrations of mercury, *p,p'*-dichlorodiphenyldichloroethylene, and copper are 30%, 50%, and 20%, respectively. Assuming these losses are independent and additive, the resulting toxic effect of these contaminants would result in only 7% residual reproductive services and a 93% decrease in reproduction with attendant service loss as:

$$(1-0.3)(1-0.5)(1-0.2)=0.07 \quad \text{and} \quad 1-0.07=93\% \qquad (1)$$

The assumption that contaminants have additive effects could lead to either under- or overestimation of their true impact on reproduction, and the impact likely would differ depending on the species involved. Other scenarios and assumptions that could be postulated include:

1. Assuming that all of the toxic effects of the suite of contaminants is due to the single contaminant most toxic to that species, yielding a service loss as measured by reproduction of 20%, 30%, or 50%.
2. Assuming that all species are affected maximally by the most toxic contaminant, yielding a service loss as measured by reproduction of 50%.
3. Assuming an additivity ratio of less than 1, yielding a service loss as measured by reproduction between 20% and 93%.
4. Assuming some degree of synergism or antagonism among contaminants, yielding a service loss as measured by reproduction of potentially less than 20% or greater than 93%.
5. Assuming that losses are species specific, the magnitude of impact varies as a function of other environmental conditions during the time of exposure, and the concentration of the contaminants is not constant through time.

To address all scenarios would be time consuming and costly, and it is as likely as not that the results of at least some of the tests would be equivocal. Therefore, we strongly support thorough uncertainty analyses to identify the most important variables affecting estimates of service losses, together with statements that serve to bound the range of possible losses.

In some situations, either the suite of contaminants and potentially impacted natural resources are few, or the amount of empirical information available is relatively large. For example, at sites where sediment toxicity is the primary concern, large empirical databases of effects ranges are measured for exposure to multiple chemicals at environmentally relevant exposures. These databases can be mined to establish an appropriate measurement endpoint (e.g., probability of toxicity or exceeding a Sediment Quality Guideline) for translation to service loss. This type of approach, described above, was used by NRDA practitioners at the Southeast Texas sediment site to estimate service losses from the cumulative effects of PAHs and metals in intertidal sediments. In that case, Mean ERM-Qs were calculated across chemicals and related to a service loss on the basis of the underlying probability of toxicity. Rather than using a mean quotient, Field et al. (2002) proposed using the maximum probability of observing a toxic response (P_{Max}) in sediments as an estimate of service loss. P_{Max} is derived from the maximum probability of toxicity across logistic regressions of probabilities of toxic responses for individual chemicals. The individual chemical logistic regressions used to derive P_{Max} come from a large database of environmentally relevant

sediment toxicity information. Field et al. (2002) posit that P_{Max} has certain advantages over the averaging approach, but because both cases rely on literature-derived data, sites with unique resource species, chemical mixtures, or mixture ratios could require site-specific information.

Aggregating across natural resources—At most NRDA sites, multiple natural resources suffer injury, and the total service loss needs to be translated as 1 or more metrics to scale the appropriate amount of restoration. This is often done by aggregating the total service loss into a loss of habitat and by scaling that loss to an equal amount of habitat restoration through the HEA process. Aggregation of service losses can be addressed at more than 1 point in a HEA, and several different approaches have been used to develop translation metrics to aggregate measurement endpoint responses or service losses across multiple natural resources to guide selection of restoration projects.

One approach is to develop a single function of total residual services relative to exposure concentrations (Cacela et al. 2005). In this approach, all relevant toxicity endpoints and dose–response relationships over a variety of affected resources are considered by an expert panel. The panel relates the available toxicity information and exposure levels to the residual level of services and then multiplies the residual services at enough points across the range of exposure concentrations to develop a relationship between exposure concentration and total residual services. An underlying assumption in this approach is that the available toxicity relationships include an appropriate distribution of natural resources so that natural resource services are represented fully. This approach likely is more appropriate in cases in which the adverse effects on all relevant natural resources occur over a similar range of exposure conditions than it is in cases in which responses vary significantly among natural resources. The total residual services might be underestimated if too many similar residual services are aggregated in the multiplicative function. In the illustration provided by Cacela et al. (2005), the goal was to estimate service losses relating to PAHs in the sediments that were thought primarily to affect fish and benthic invertebrates. In this case, the adverse effects threshold data and the exposure–response curves for both impacted groups covered the same general range of sediment PAH concentrations (1–250 mg/kg dry weight).

Another approach for aggregating service losses across multiple natural resources in a habitat is to estimate losses to different categories of natural resources separately and then to aggregate losses across categories. In this approach, practitioners select several categories of natural resources, assign a fraction of the total resource services to each category, develop translation metrics within each category, calculate a percent service loss within each category, and then calculate a total service loss with the use of the weighted sum of percent service loss across the categories:

$$\text{Service loss} = \sum (\text{fraction of service for resource category } i) \times (\text{service loss for category } i) \quad (2)$$

An approach like this was used for the Hylebos Waterway described earlier. One advantage of this approach is that it allows different types of toxicity data and translation metrics to be used for different categories of organisms, thus avoiding the need to combine dissimilar types of information. This approach can result in apparently illogical conclusions, however, if 1 category of natural resources is significantly more affected than the others. To illustrate with a hypothetical example, assume that marsh birds are determined to represent one-fifth of the service flows in a given marsh habitat and are severely affected, whereas the natural resources making up the other 80% of the service flows are not directly affected. In this case, the maximum percent service loss for the habitat would be only 20%, even if the birds were completely extirpated at the site. In this situation, the Trustees could conduct an REA for the birds and determine the amount of habitat needed to create the appropriate number of discounted bird years in lieu of the HEA.

Another alternative would be to evaluate natural resources in categories and then aggregate across categories in the restoration portion of the HEA, rather than to attempt to estimate a total service loss. In this approach, practitioners would select several categories of natural resources, develop translation metrics within each category, calculate a percent service loss and corresponding DSAYs for each category, and then look for restoration projects that address all of those DSAYs at once. For example, consider a situation involving excessive selenium in a tidal marsh. Toxicity thresholds for effects on vegetation and benthic invertebrates and a dose–response curve for marsh birds could be used separately to translate the toxicity information for each natural resource category into service losses. The result might suggest that the vegetation loss would require 5 acres of tidal marsh, the benthic invertebrate loss 15 acres of tidal marsh habitat, and the bird loss 85 acres of tidal marsh. In this situation, a single restoration project that creates and maintains 85 acres of tidal marsh would address all of the injury categories simultaneously.

Ultimately, the advantages and limitations of any aggregation approach need to be evaluated relative to the facts and circumstances of each NRDA case. The use of expert panels or cooperative assessments can be helpful in determining the number of contaminants and natural resources or resource categories to be evaluated, the translation relationships to be used, and the aggregation approach that is appropriate to ensure that the most logical and transparent restoration scaling approach is identified. The potential impact of the uncertainty introduced in each step should be carried through the analysis to estimate its impact on the range of sizes and costs of restoration projects. In this way, the parties should be able to determine whether the existing uncertainties can be addressed through restoration (especially since larger restoration projects are generally more cost effective than smaller ones on a per acre basis) or whether additional study might be warranted to reduce specific uncertainties in the analyses.

SUMMARY OBSERVATIONS

The process of translating measurement endpoints from ERA and other assessments conducted as part of a CERCLA RI/FS into service losses for NRDA injury determination and restoration scaling is complex. Although there is not full agreement among Trustees, industry representatives, USEPA, consultants, and academics, the authors of this paper believe that both ERA and NRDA would benefit generally if ecosystem services provided by natural resources to humans and ecosystems are used as a common currency. We also believe that no single method or approach for translating measurement endpoints into service losses, or for aggregation of those losses, is applicable to all situations and sites. Selection of the most appropriate translation or aggregation approach undoubtedly will involve negotiations among the

various parties involved at a site and will incorporate many of the considerations identified in this paper.

The types of data required by ERA and NRDA generally are very similar, although the measurement endpoints themselves often vary. Consequently, integration of ERA and NRDA could be enhanced through the use of resource- or service-related assessment and measurement endpoints (the common currency) in the ERA that would both benefit the ERA and better inform the NRDA. We recommend that Trustees, BTAG members, and other parties with expertise in ERA and NRDA convene to expand the set of the USEPA's (2003) GEAEs to include additional ecosystem service endpoints that are particularly responsive to the needs of both assessments at local and national scales.

Enhanced integration of assessment approaches likely will require involvement of NRD practitioners representing the Trustees and responsible party or potentially responsible parties (RP/PRPs) early in the planning and design of the ERA, nature and extent determination, and other pertinent components of the remedial investigation. This would enable incorporation of service-based assessment and measurement endpoints into the ERA that could readily be translated into service losses for NRDA purposes. Supplemental data collection also could be incorporated into the nature and extent component to better inform both the ERA and damage assessment. Recognizing that incorporation of additional NRD-related endpoints or data collection into an RI is beyond the USEPA's regulatory authority, it is our view that most RP/PRPs would be willing to provide the additional funding, generally via a specific funding and participation agreement, in that it would increase efficiency, reduce overall costs, and promote a quicker and more satisfying decision process.

Integration might best be facilitated with a DQO process to determine modifications or enhancements to traditional ERA measurement endpoints or to identify additional studies that would be required for injury determination and restoration scaling. The DQO process also would ensure that endpoint changes do not compromise the ERA. Involvement of the BTAGs could assist in the integration process. Traditionally, BTAGs have expressly avoided discussing NRDA-related matters; we believe this has lead to inefficient and more costly remedial and restoration actions than could be achieved by a more integrated approach.

Biodiversity measurement endpoints were acknowledged to be good indicators of many important ecosystem services. We recognize, however, that quantification of the relationships between biodiversity and ecosystem service risk and losses could require substantial additional investigation, something not likely to be supported in most CERCLA cases. Consequently, we encourage continued attention by the environmental and ecological research communities to help establish the linkages between diversity measures and ecosystem processes for use in ERA and NRDA.

Finally, it is our opinion that methods for aggregating service losses should be selected on a site-specific basis and that no best approach exists universally. Examples of 3 approaches that we believe to be particularly useful are provided, together with the discussion of potential methods for aggregating across contaminants and across resources to aid practitioners in determining the method that is most applicable for their sites. We encourage further innovation in the development and evaluation of aggregation methods to enhance quantification of ecosystem service losses.

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Special Series

The Nexus Between Ecological Risk Assessment and Natural Resource Damage Assessment Under CERCLA: Introduction to a Society of Environmental Toxicology and Chemistry Technical Workshop

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EDITOR'S NOTE:

This is 1 of 4 papers reporting on the results of a SETAC technical workshop titled "The Nexus Between Ecological Risk Assessment and Natural Resource Damage Assessment Under CERCLA: Understanding and Improving the Common Scientific Underpinnings," held 18–22 August 2008 in Montana, USA, to examine approaches to ecological risk assessment and natural resource damage assessment in US contaminated site cleanup legislation known as the Comprehensive Environmental Response, Compensation, and Liability Act.

ABSTRACT

A SETAC Technical Workshop titled "The Nexus Between Ecological Risk Assessment and Natural Resource Damage Assessment Under CERCLA: Understanding and Improving the Common Scientific Underpinnings," was held 18–22 August 2008 in Gregson, Montana, USA, to examine the linkage, nexus, and overlap between ecological risk assessment (ERA) and natural resource damage assessment (NRDA) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Experts from a broad range of relevant scientific, legal, and policy disciplines convened to 1) ascertain the potential for improved scientific harmonization of the processes of ERA and NRDA; 2) identify where statutory, regulatory, or scientific constraints might exist that would constrain or preclude the harmonization of the 2 processes; 3) determine approaches that might overcome these constraints; and 4) recommend research or potential changes in regulatory policies that might serve to improve both processes. This is the introduction to a series of 3 papers that describe the findings and conclusions of this workshop. Although unanimity was not achieved on all technical, legal, or policy questions posed to the participants, some consensus areas did arise. First, there appear to be few if any legal constraints to using the environmental data collected for ERA or NRDA for both processes. Second, although it is important to recognize and preserve the distinctions between ERA and NRDA, opportunities for data sharing exist, particularly for the characterization of environmental exposures and derivation of ecotoxicological information. Thus, effective coordination is not precluded by the underlying science. Where a cooperative, interactive process is involved among the response agencies, the natural resource trustees, and the responsible party(s), technical, legal or regulatory constraints can be minimized. Finally, one approach that might enhance the potential applicability of data collected for the ERA is to consider ecosystem services in the development of assessment endpoints. These points are explained in greater detail in the series of papers published herein.

Keywords: Ecological risk assessment Natural resource damage assessment Workshop SETAC

BACKGROUND

Within the United States, increasing attention has been directed at assessing and remediating legacy contamination at sites under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The scale of activities at these large, more complex sites has also grown, particularly in the context of ecological risk assessments (ERAs) and natural resource damage assessments (NRDAs). More often than not, these 2 types of assessments (ERA and NRDA) are undertaken over multiple years, involving scientists, engineers, and others from numerous affiliations, and frequently require substantial levels of funding. This, in turn, has highlighted the increased need for scientifically

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sound, cost-effective approaches that maximize the applicability of the diverse physical, chemical, biological, and toxicological data for multiple decision purposes—whether for the ERA or the NRDA.

To some, there is overlap between the collection and use of data for the ERA and NRDA. Yet practitioners of ERA and NRDA continue to detect a real or perceived demarcation between the use of and need for data in the processes of ERA and NRDA at CERCLA sites. The question often becomes whether the physical, chemical, and biological data are applicable for both processes. If the answer is the data are not applicable for both purposes, then one tends to question whether that decision was made on a legal or technical basis.

To our knowledge, this important question has not been addressed in any scientific forum, despite the belief that there are clear linkages and overlaps between the processes of ERA and NRDA at CERCLA sites (Barnthouse and Stahl 2002). The need for such an evaluation has been illustrated recently in a Department of the Interior Federal Advisory Committee (FACA) report that highlighted the issues and potential actions that might be needed to improve the NRDA process nationally (US Department of Interior 2007). It was recognized by the FACA and presented in the final report that coordination and even integration between the ecological risk assessment process (conducted as part of the remedial investigation/feasibility study, and which could provide information on transport and fate of contaminants and exposure information) and NRDA might be desirable. Coordination between the ERA and NRDA would also prevent a situation in which a site clean-up would create more damage than leaving the contamination in place. Our workshop addressed this issue of coordination as part of the Synthesis Work Group charge (Gala et al. 2009), and it was discussed broadly by all participants during opening plenary sessions.

As noted above, it is generally recognized that much of the field and laboratory data collected for ERAs and NRDAs at contaminated sites are similar, even though the ultimate interpretation and use of those data might differ (Barnthouse and Stahl 2002). The purpose of an ERA at a CERCLA site is to help estimate potential ecological risks on the basis of exposure to chemical contamination (USEPA 1997). The ERA informs the decision on clean up levels needed to mitigate potentially unacceptable risks. In contrast, the purpose of a natural resource injury assessment is to quantify what effects (e.g., toxicity) and derivative natural resource service losses might be present because of the exposure of ecological resources (receptors) to hazardous substances or oil (US Department of Interior 1987; NOAA 1996).

The Steering Committee for this workshop developed critical questions, such as: Where are the overlaps in the 2 assessment approaches and their respective data needs and use? What are the strengths and limitations relative to the needs of environmental decision making between these two? Is there an opportunity or not to combine some element of the 2 approaches in a way that reduces the time and cost associated with them. Furthermore, we thought it was important to understand whether statutory and regulatory boundaries between these 2 approaches exist and discuss whether these in fact have been one of the root causes of the continued debate about the need for and use of particular types of environmental data.

These issues and the scientific, policy, and legal questions they evoke are timely, and addressing them is important to scientists and decision makers in the public and private sectors. This workshop was designed to help address these issues with the use of the SETAC format for similar technical undertakings. This is the introductory paper to a series of 3 papers that follow that describe the genesis, deliberations, and results of the SETAC workshop on the nexus between ERA and NRDA. In the 1st paper (Gouguet et al. 2009), issues regarding potential legal constraints on the use of common data sets is addressed, whereas the 2nd paper (Gala et al. 2009) addresses the common elements and potential scientific constraints that might exist between ERA and NRDA data collection and utilization. The 3rd paper (Munns et al. 2009) tackles the issue of whether or not a "common currency" exists between ERA and NRDA as it relates to the translation of potential risk into potential ecological service loss.

OBJECTIVE AND RATIONALE

The objective of this workshop was to evaluate critically the scientific underpinnings, overlaps, and boundaries between ERA and NRDA under CERCLA, as they relate to the collection, interpretation, and utilization of environmental data, and the subsequent management actions that are developed using this and other information. In addition, this workshop attempted to evaluate the applicability and technical underpinnings of methodologies used in the translation of natural resource injuries into natural resource service losses, and the relevance of ERA methodologies to these issues. Although it is too early to draw final conclusions, it is hoped that the results of this workshop, as published in the series of papers herein, can be used as a starting point for dialog between practitioners in the public and private sectors on how to improve NRDA as well as ERA. Discussions with policy and decision makers at the state and federal levels may follow these technical discussions between practitioners, but to propose this as an important objective of the workshop was beyond its scope.

With its focus on assessment approaches to improve environmental decision making, this workshop was built on advances made in previous SETAC-sponsored workshops. They helped to stimulate the questions posed to the workshop participants (Table 1).

The steering committee felt that the technical advancement at the nexus of ERA and NRDA continues to suffer from the lack of open, scientific debate among practitioners and decision makers within the regulatory and regulated communities, potentially because of the litigious nature of the process for assessing and managing contaminated sites. Just as important, there appeared to be a limited number of publications that documented approaches for NRDA, in particular where there were overlaps in the collection and use of environmental data for the ERA.

KEY FINDINGS

The detailed findings from each of the 3 workgroups can be found in the papers that follow. Briefly, however, the key findings are as follows: 1) Few, if any, legal impediments exist to using physical, chemical, or biological data for both the ERA and the NRDA. However, there are and may continue to be policies or practices that will determine whether these data are applicable for both purposes at specific contaminated sites. 2) Although it is important to recognize that distinctions can exist in the spatial and temporal domains of the 2

Table 1. Questions addressed by the ERA/NRDA workshop participants[a]

- What are the technical, statutory, and regulatory drivers that hinder or foster the common use of environmental data for ERAs and NRDAs under CERCLA and related federal statutes?
- What commonalities and differences exist in the technical information required by decision makers that currently are provided separately by ERAs, NRDAs, and assessments of natural resource injuries and, ultimately, natural resource service losses?
- What are the decisions to be made under ERAs and NRDAs? What are their data quality objectives? Is it feasible or even constructive to find a common currency recognizing that the outputs from an ERA and an NRDA are fundamentally different?
- What are the scientific underpinnings of data collection, interpretation, and utilization that are shared between ERAs and NRDAs?
- What are the uncertainties associated with the scientific underpinnings, and how might they be addressed?
- What are the technical areas in which additional research or tools are needed?
- Is there the potential for a "common" assessment approach that can be applied for contaminated media that is responsive to the needs of decision makers and provides the required estimates of risk and injury? Is there a way to synthesize the approaches into a single methodology that will satisfy the technical requirements of both ERA and NRDA?
- What are the technical issues related to translating, or not, estimates of ecological risks and natural resource injuries into natural resource service losses?
- Is there a "common currency" among ecological risk, natural resource injury, and natural resource service loss that could be useful to assessment practitioners and decision makers?

[a] CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; ERA = ecological risk assessment; NRDA = natural resource damage assessment.

analyses, as well as the nature of data needed to make decisions, opportunities for data sharing exist, particularly for the characterization of environmental exposures, as well as the derivation of ecotoxicological information for a number of response measures. In sum, effective coordination is not precluded by the underlying science. 3) Consideration of ecosystem services in the development of assessment endpoints for the ERA could help to enhance the applicability of the data collected for the NRDA.

CONCLUSIONS AND RECOMMENDATIONS

On the basis of the deliberations at this workshop we conclude that few legal and scientific constraints exist that would preclude the use of common physical, chemical, and biological data for both the ERA and the NRDA. As described in the 3 papers that follow, caveats to this broad statement are noted accordingly in more detail. In addition, although no one approach is likely that might enhance the utilization of a common data set for both ERA and NRDA, it is possible that considering ecosystem services in developing assessment endpoints for the ERA would be beneficial in this regard. We recommend that this consideration be pursued by those interested in seeking and testing approaches to improve the nexus between ERA and NRDA and, if necessary, undertaking a future workshop or conference to address it.

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Disclaimer—Although some of the authors of this paper are employees of governmental agencies, the ideas described herein do not necessarily reflect the policies of those agencies, and no official endorsement should be inferred. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

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Integrated Environmental Assessment and Management

Effective Coordination and Cooperation Between Ecological Risk Assessments and Natural Resource Damage Assessments: A New Synthesis

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ABSTRACT

Although ecological risk assessments (ERAs) and natural resource damage assessments (NRDAs) are performed under different statutory and regulatory authorities, primarily the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as currently practiced, the activities typically overlap. ERAs performed as part of the response process (typically by the US Environmental Protection Agency [USEPA]) should be closely coordinated with the natural resource trustees' (trustees') NRDAs. Trustees should actively participate in the early stages of the remedial investigation (RI) and work with USEPA, including the potentially responsible parties (PRPs), when appropriate, to coordinate NRDA data needs with those of the RI. Close coordination can present opportunities to avoid inefficiencies, such as unnecessary resampling or duplicate data gathering, and provide the opportunity to fulfill both process requirements with a few well-designed investigations. Early identification of opportunities for practical combined assessment can save money and time as the restoration process proceeds and facilitate a cooperative resolution of the entire site's CERCLA liability. The Society of Environmental Toxicology and Chemistry (SETAC) convened an invited workshop (August 2008) to address coordination between ERA and NRDA efforts. This paper presents the findings and conclusions of the Framework Work Group, which considered technical issues common to each process, while mindful of the current legal and policy landscape, and developed recommendations for future practice.

Keywords: Ecological risk assessment Natural resource damage assessment CERCLA Coordination Assessment endpoints

INTRODUCTION

A Society of Environmental Toxicology and Chemistry (SETAC) technical workshop was convened to discuss how ecological risk assessment (ERA) and natural resource damage assessment (NRDA) data needs and assessment processes could be more closely linked (Stahl et al. 2009). The attendees of the workshop included ERA and NRDA practitioners from the public and private sector, many of whom have been on opposite sides of contentious, even litigious, NRDA cases. A subgroup was convened to examine the statutory, regulatory, and technical foundations of these processes to determine if there are underlying elements that hinder or foster the use or sharing of information across programs. Though there are certain unique requirements for each, both programs typically rely on a common suite of core environmental data, such as information on chemical residues in abiotic and biotic media, habitat characterization, biological surveys, and toxicity testing. Yet, in many instances, data collected under 1 program are not used under the other. This can lead to redundant and more costly investigation efforts and an extension of response or restoration timeframes. The

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objectives of this subgroup were to explore the potential reasons for these inefficiencies and, to the extent possible, suggest approaches that could be adopted to facilitate more efficacious information sharing. This paper is 1 of 4 that detail the deliberations and findings of the SETAC technical workshop on the nexus between ERA and NRDA.

LEGAL BACKDROP OF ERA AND NRDA

ERA and NRDA are both creations of laws that embody the principle that the environment should provide valuable public and natural resources and pose no unacceptable risks from hazardous substances. Those laws, such as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and its state law counterparts, invest federal, state, and tribal authorities with the authority to remediate toxic contamination and restore or secure compensation for natural resource injuries. Though technically focused, at their core laws and regulations create a process for record keeping and decision making that is driven by legal standards and statutory objectives. This paper focuses on the CERCLA process for ERA and NRDA and the respective roles of the US Environmental Protection Agency (USEPA) and the natural resource trustees (trustees) under the CERCLA statute, but the concepts are also valid for similar processes under state laws.

Under CERCLA, USEPA has primary responsibility for remedy selection. In this regard, USEPA is charged with implementing remedies that eliminate unacceptable risks to human health and the environment that are posed by the release or threatened release of hazardous substances. The trustees, which include the federal government, states, and Native American tribes, have the authority under the statute to restore, replace, or acquire the equivalent of natural resources injured by the release of hazardous substances. The performance of these statutory duties includes conducting scientific evaluations designed to inform decisions. In both situations, the ultimate financial responsibility rests with those who are known under CERCLA as potentially responsible parties (PRPs).

The CERCLA remedial investigation (RI) performed by USEPA is the 1st part of a 2-phased process and is followed by a feasibility study (FS). The RI focuses on data collection for the purpose of delineating the nature and extent of contamination and includes an ecological risk assessment (ERA), which is intended to evaluate risks to the environment. The remedial investigation/feasibility study (RI/FS), as well as the remediation itself, is part of what are broadly defined under CERCLA as "response actions." Trustees, on the other hand, perform damage assessments to "determine compensation for injuries to natural resources that have not been nor are expected to be addressed by response actions" (US Department of the Interior [USDOI] 2005a, §11.10). NRDAs include data collection as part of the injury determination phase, which is followed by the determination and quantification of damages. The goal of the NRDA is to identify restoration needs and provide compensation to the public for lost services.

Data sharing and coordination: The legal environment

In practice, ERAs and NRDAs have often been conducted as independent exercises, with their own data collection and management procedures. Accordingly, data sharing and coordination has been more the exception than the rule, so much so that questions have arisen as to whether such sharing is actually restricted by law. It is not. Nothing in CERCLA or its implementing regulations prohibits the sharing of data between ERAs and NRDAs. There may be specific constraints on how data from 1 program may be used in another, but that should not be confused with a legal restraint on sharing.

If anything, there is a trend in federal and state policy and guidance to favor a more coordinated approach to remediating and restoring natural resources (USDOI 2007). Implicit in these authorities and guidelines is the need to share data and coordinate management among programs, including ERAs and NRDAs. Comprehensive, large-scale restoration efforts, such as those in coastal Louisiana (PL 101-640, 1990), the Everglades (PL 106-541, 2000), and the San Francisco Bay–Delta region (PL 108-361, 2004) exemplify the trend.

For example, the Texas Commission on Environmental Quality (TCEQ) is both the lead response agency and a trustee agency and is thus responsible for the cleanup and a participant in the NRDA as a cotrustee. Four other agencies (the National Oceanic and Atmospheric Administration [NOAA], the US Fish and Wildlife Service [USFWS], Texas Parks and Wildlife, and the General Land Office) share cotrusteeship with TCEQ. In-house management of these dependent and sometimes overlapping responsibilities led TCEQ to recognize the need for better and more formal coordination of these related environmental restoration activities among the agencies.

In 2001, a memorandum of understanding (MOU) executed among the 5 trustee agencies and TCEQ to coordinate the ERA and the Texas ecological services analysis (ESA) was adopted as a state regulation (Texas Commission on Environmental Quality 2001). The ESA employs tools and methods typically associated with NRDA. Tools such as the habitat equivalency analysis (HEA) (NOAA 2000), compensation scaling (NOAA 1997), and sediment quality guideline-based assessment (Gouguet 2005) are used to select ecological risk management options. In ESA, if human health risk is appropriately managed and ecological risks are shown to be expected to recover over a reasonable time, "compensatory restoration" can be used to manage the remaining ecological risk while monitored natural recovery (MNR) occurs. This quantum of restoration credit is also considered a portion of the overall compensable natural resource loss, a down payment for continuing natural resource service losses during MNR. The trustees must take care to ensure that "double recovery" (i.e., double collection of damages for the same injured resource [USDOI 2005b, §11.15(d)]) does not occur. The trustees typically ensure that the "remaining" NRDA liability is resolved through restoration-based solutions. This method is a version of the environmental benefits analysis environmental management approach (Efroymson et al. 2004).

The CERCLA process was envisioned as a continuum from remediation to restoration. The statute and its implementing regulations suggest a certain degree of coordination. For example, Section 104(b)(2) of CERCLA requires USEPA to "seek to coordinate" assessments, evaluations, and investigations with state and federal trustees when natural resources are affected (Public Health and Welfare 2003, §9604[b][2]). The language is mirrored in the National Contingency Plan (NCP; USEPA 2005b, §300.430[b][7]). Similarly, the law requires coordination among federal, state, and tribal trustees and between trustees and USEPA. For example, field samples

and data collection in the early stages of the NRDA "should be coordinated with [USEPA] to minimize duplication of sampling and data collection efforts" (USDOI 2005c, §11.22[b]). Within the NRDA process, trustees with overlapping jurisdiction are required to inform one another of potential actions, such as the development of an assessment plan, and are generally encouraged to cooperate and coordinate assessments (USDOI 2005d, §11.32[a][1] and [2]).

Significantly, the regulations state that the trustees are required to notify PRPs before the commencement of a damage assessment, and they must invite "the participation of the [PRP] in the development of the type and scope of the assessment and in the performance of the assessment" (USDOI 2005d, §11.32[a][2][iii][A]). Any meaningful coordination between the USEPA-led ERA and the trustee-led NRDA must be accompanied by some form of formal cooperative arrangement between PRPs and trustees in the damage assessment process.

Although there is substantial overlap in the data used by the 2 processes, the ERA will usually not provide certain information required for the NRDA. For example, the NRDA has a phase to quantify damages, including lost services. Typically, the quantification of service losses will not be relevant to support the selection of a remedy at a CERCLA site and is usually outside the scope of the ERA. A companion paper (Gala et al. 2009) provides a more thorough comparison of the ERA and NRDA processes and identifies clear opportunities to improve both processes through "cross-fertilization" and better coordination.

The USEPA is not authorized to recover the costs of studies or other tasks that do not support the remedial decision and that do not qualify as response actions under CERCLA. This gap in authority can be overcome by a formal agreement for cooperation among USEPA, the trustees, and the PRPs—wherein the parties agree in advance to broaden the scope of data gathering for the ERA beyond what would otherwise be relevant to remedy selection, and the PRP agrees to cover the additional costs as part of the a NRDA. Formal cooperation among USEPA, PRPs, and trustees has other advantages, such as data sharing, as discussed below.

Data sharing in an adversarial process

Data sharing is not illegal; in fact, some laws and policies encourage it (e.g., Public Health and Welfare 2003, §9604[b][2]). The language is mirrored in the NCP (USEPA 2005b, §300.430[b][7]). However, the legal nature of the ERA and NRDA processes, coupled with the respective interests of their participants, can and does affect the climate and culture for data sharing, cooperation, and coordination. Simply put, CERCLA imposes a liability scheme, making the recovery of costs for response actions and natural resource damages (NRDs) essentially adversarial. Monetary exposure, corporate image, and legal precedent are all at stake, and these dynamics affect the ways in which the participants behave. Data sharing can and does take place in this environment, but it is often not done in a spirit of cooperation among technical experts. Rather, it is often based on a strategic decision largely controlled by individuals who are often well removed from the technical realm and might be operating under a different set of motives.

If there are practical constraints on sharing and collaborating among USEPA, the trustees, and the PRPs, generally it is for the above reasons. But although these are adversarial proceedings, it does not mean that the role for sharing and collaboration is not significant. Improved cooperation and coordination will require a greater understanding and appreciation of 1) the duties and objectives of the parties involved and 2) the benefits that sharing and collaboration can provide. Consideration should be given to developing an "alternative resolution process" that encourages a more cooperative and efficient approach to reaching remedial and NRDA settlements. Improved cooperation will also facilitate the use of data sharing agreements, MOUs, and stipulations that build on shared experience but allow for the uniqueness of each case.

BARRIERS TO COORDINATION OF ERAS AND NRDAS

Even though the provisions of CERCLA and its implementing regulations require coordination between USEPA and the trustees in the conduct of ERAs and NRDAs, many institutional barriers make coordination a challenge. Chief among these barriers are distrust, timing, funding, and the need to retain rights to litigate, among others (Table 1), as discussed below.

CERCLA creates a dynamic for the lead remedial agency, the trustees, and the PRPs, which, on its face, does not lend itself to cooperation. The statute establishes a "Superfund" of appropriated funds, taxes on feedstock chemicals, and enforcement actions against PRPs to provide funding for hazardous substance-related response. The CERCLA program, in part, also depends on settlements and unilateral orders under which PRPs perform or pay for remediation and, in the case of NRD provisions, under which they perform restoration or compensate the public for documented natural resource injuries.

If no settlement is reached with the PRPs on remediation, USEPA can issue a unilateral administrative order, sue for an injunction, or fund the cleanup and sue for recovery of its response costs. If no settlement is reached with the PRPs on NRD, the government can file suit against the PRP to recover damages. Thus, the agencies and PRPs must find a way to work together cooperatively while preparing to litigate if no settlement is reached. This dynamic drives all parties to be reluctant to share information and inhibits the development of a partnering relationship that could lead to the efficient conduct of the studies.

PRPs often adopt dramatically different approaches to dealing with this perceived conflict. Some PRPs believe that they can best defend themselves against their potential liability under CERCLA by becoming actively involved with USEPA and the trustees; others believe that their best defense is to prepare for litigation and not to participate in cooperative activities with the agencies. The requirement that full consensus be achieved both by the agencies and the PRPs, particularly groups of PRPs with divergent interests, makes decision making difficult. The lack of strong leadership or lack of an established decision-making framework among the government and PRP representatives can lead to indecision or decisions that are not necessarily representative of the position of the majority of the group being dictated by the most vocal or extreme party. Extreme positions can polarize the parties, making coordination and cooperation all the more difficult. Coordination is also made more challenging by the fact that PRPs tend to be less familiar with NRDAs than with the RI/FS process, including ERAs.

Table 1. Examples of barriers to coordination and cooperation in ERA and NRDA[a]

Barrier
Need to preserve litigation options stifles cooperation/coordination
• "Litigation sensitivities" make information sharing and communication difficult
Lack of trust at the outset
• Preconceived perceptions of the "other side" and their motivations
• Experiences at other sites, "war stories," reinforce these prejudices
Limited sharing of technical data
• Adversely affects trust (e.g., they're hiding something)
• Not currently done on a regular basis
• Intellectual property issues with academic-led research efforts
• Legal constraints (e.g., preparation for litigation)
Lags in interaction: Historically NRDA is conducted afterward to remedy selection
• Late trustee involvement in the RI/ERA leads to missed opportunities for data collection to meet NRDA needs
• Funding for trustee participation in RI/ERA has to be secured
Lack of trustee management direction facilitates inefficiencies in approach
• Managers must specify goals
• Managers must supervise staff/counsel/contractors to ensure activities are directed toward achieving goals
• Allows personalities and agendas to dictate NRDA approaches and outcomes at sites, rather than process and data
Lack of current guidance for the conduct of NRDA
• Inconsistent approaches to NRDA
• Uncertainties on process and outcome can lead to PRPs to delay NRDA involvement
Requirement for complete unanimity or "consensus" on Trustee side
• "Lowest common denominator" or "most conservative estimate" driving decisions

[a] ERA = ecological risk assessment; NRDA = natural resource damage assessment; PRP = potentially responsible party; RI = remedial investigation.

The NRDA and ERA are complementary processes that should be coordinated and, when the PRPs are involved, can be performed cooperatively. If the 2 processes are not well coordinated, USEPA and the trustees might miss an opportunity to develop a common conceptual site model, with the result that no coordination of data quality objectives will occur to govern studies. To some degree, this results from the historical practice whereby USEPA typically conducted its RI/FS, including the ERA, before the trustees conducted their NRDA. Although there are exceptions in which the NRDA has preceded the ERA, CERCLA presumes that when an RI/FS is being conducted, the NRDA will follow remedy selection. The reason underlying this order is that NRDs are the residual damages to natural resources that remain after the remedy has been completed. Indeed, CERCLA prohibits the filing of an NRD claim "before selection of the remedial action if the President is diligently proceeding with a remedial investigation and feasibility study" (US Code 2003, § 9613 [g][1][B]). However, notwithstanding the statutory structure that makes NRD residual to the remedy, unless the design and conduct of the 2 studies are closely coordinated, data collection can suffer from inefficiency, including a duplication of effort or worse—data gaps that can impede the resolution of site risks and natural resource liability.

A genuine mutual intent on the part of both trustees and PRPs to cooperatively settle issues is a pivotal condition for finding ways of coordinating or cooperating in assessments. Excessive focus on potential future litigation could result in the management of the process being surrendered, by default, to attorneys in the initial stages of the NRDA. Perceptions of looming litigation can pervert the technical exchange, stifle communication, and prevent input to the problem formulation or assessment plan. Missed opportunities might later force trustees to duplicate efforts that otherwise could have been coordinated to address their information needs.

Compounding this problem is the fact that the parties sometimes do not have or allocate resources early enough in the process to begin an NRDA at the outset of the ERA. Inadequate resources might also result in less management-level involvement and less supervision of staff and contrac-

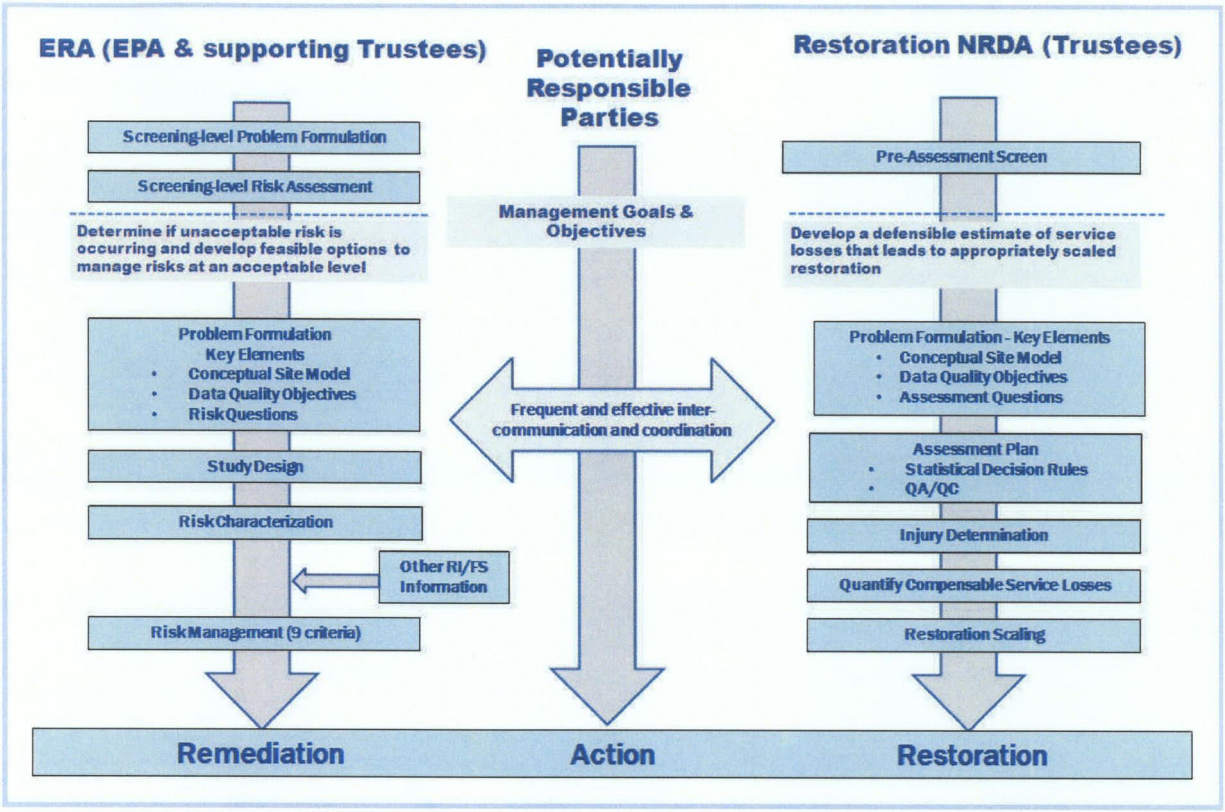

Figure 1. Perceived analogies and similarities of requirements between the ecological risk assessment (ERA) and natural resource damage assessment (NRDA) processes.

tors. In addition, a lack of close management supervision might enable inexperienced or uninformed staff members or contractors to assert undue influence that could be inconsistent with the goals of the PRPs or trustees.

Another obstacle to cooperation and coordination is the lack of explicit guidance that is consistently followed by all parties for the conduct of NRDAs as a combined effort with RI/ERAs. Although a variety of NRDA guidance documents exists (http://restoration.doi.gov/homepage.html or http://www.darrp.noaa.gov/library/1_d.html), the procedures described in many of these documents are out of date and largely ignored by the trustees or NRDA practitioners. The CERCLA/USDOI NRDA regulations that outline the details of assessment are optional for trustees, thereby allowing flexibility. Willing PRPs can take advantage of this flexibility by engaging in early coordination and cooperation of the ERA/RI and NRDA. Trustees typically encourage and welcome the approach. In fact, the DOI's Natural resource damage assessment and restoration (NRDAR) Federal Advisory Committee recommended that DOI adopt procedures that promoted coordination between response and NRDAR activities (USDOI 2007).

However, the lack of relevant, current guidance for coordinating RIs/ERAs and NRDAs creates uncertainties regarding process and potential outcome that cause PRPs to delay involvement in the NRDA until a much later phase or until a trustee files suit. For example, the absence of clear guidance can lead to highly variable approaches to damage assessments across sites, which in turn, can lead to outcomes that are dictated not just by the specific characteristics of the site and by the process and data but by the training, personalities, and preferred approaches of the individual trustees and PRP practitioners involved. This variability creates additional uncertainty that can be a disincentive for early PRP engagement in the NRDA. Explicit guidance could also suggest mechanisms by which the trustees could reach consensus on damage assessment outcomes, if the trustees work would otherwise result in divergent conclusions.

Data gathering and sharing can also present potential barriers to success. The trustees and PRPs might not be operating under the same quality assurance standards, even if, as is seldom the case, they share common data quality objectives. The possibility of litigation often leads the parties to be reluctant to share data and other information before formal pretrial discovery takes place, potentially creating significant inefficiencies.

All of these potential barriers need to be overcome before ERAs and NRDAs can be more effectively coordinated.

BENEFITS OF COORDINATION BETWEEN ERAS AND NRDAS

The entire CERCLA process (RI/FS and NRDA) should be coordinated. Statutory and regulatory requirements explicitly promote that coordination can be found in CERCLA §104(b)(2), NCP § 300.305 (USEPA 2005a), and so on. Although coordination between the lead federal response agency and the trustee should be a given, the extent to which the NRDA truly is coordinated with the RI/FS depends on the willingness of the PRPs to agree to cooperate. Figure 1 presents an idealized flow of the ERA and NRDA processes and shows how key steps line up with their counterparts in the other process and denotes the frequent and effective communication and coordination that must to occur between

Table 2. Examples of incentives for coordination and cooperation in ecological risk assessment (ERA) and natural resource damage assessment (NRDA)

Incentive	Group	
	PRP	Trustee
Access to NRDA information	•	•
Early involvement in NRDA process	•	—
Input into decision-making NRDA process	•	—
Ability to influence NRDA work conducted	•	—
Cost control		
• Reduced oversight/indirect costs	•	•
• Reduced opportunity costs for staff resources	•	•
• More options for contracting	•	•
• Not paying for shadow assessment	•	—
• Minimize need to conduct a full damage assessment for litigation	•	•
• Reduced legal costs	•	•
Building Trust		
• Earlier achievement of objectives, simultaneous on-site remediation/restoration	•	•
• Greater availability of restoration options (reduce lost opportunities)	•	•
• Accelerate achievement of restoration goals	•	•
Access to external funding	—	•
Leverage other funding sources (internal and external)	•	•
Good will	•	•
Common public outreach	•	•

the processes to be most successful. The Lavaca Bay, Texas, USA, National Priorities List (NPL) site may have come closest to this ideal (LBNRT 1999) (see *Case Studies* below).

Notwithstanding the barriers that could thwart direct cooperation on ERAs and NRDAs between USEPA and the trustees (Table 1), many substantive benefits can result from cooperation with the PRPs (Table 2). However, it could be difficult to forge formal agreements. Too many compromises necessary to bring all players into agreement can make such agreements unworkable in practice. In other words, an "all or nothing" approach to coordination is often not a successful strategy; rather, as discussed below, incremental steps are more likely to lead to success.

An approach that has been demonstrated to be successful is a process whereby trust is built through a series of small discrete steps (e.g., production of the assessment plan) implemented through a series of short-term agreements under which the financial and technical commitments of the parties are limited. Including PRPs in the early stages of the development of the assessment plan and sharing information, especially nonsensitive data, can demonstrate a commitment to build trust, which in turn can lead to increased cooperation.

The commitment to coordinate through the sharing of information can also translate into significant cost savings on the part of both the PRPs and trustees. For instance, a reduction in some of the redundant oversight tasks can free staff to work on other priorities and increase flexibility, including the consideration of innovative options for contracting for the work to be done. The PRPs can also benefit from an elimination of the need to engage in a shadow NRDA. Both groups have the potential to realize additional cost savings through reduced legal costs and a reduction in the need to conduct a full damage assessment for litigation.

In a properly coordinated approach, the parties become more comfortable with the process by virtue of having early involvement in the structuring of the assessments. PRPs benefit by having the opportunity to express their concerns to the trustees, provide input to the NRDA, and offer suggestions and critiques of the proposed assessment. Collegial exchanges serve to foster a climate of trust and set the stage for further cooperation as the assessment progresses.

Perhaps the most important benefit that results from successful coordination is that the ultimate goals and objectives of both groups can be realized more quickly, efficiently, and thoroughly. Rather than the participants assuming a confrontational stance in which ideas from the other side tend to be challenged reactively, the coordinated approach creates a climate in which alternative ideas can be analyzed more objectively and constructively. Furthermore, the simultaneous engagement of remediation and restoration actions minimizes or eliminates situations whereby remediation actions conflict with restoration actions. The elimination of such conflicts also creates additional opportunities that could be considered for restoration. The cooperative approach can also reduce the overall time required to complete the restoration activities.

Finally, the coordinated approach can provide the trustees with access to funding to enable participation in the process. Both groups in a cooperative approach are more likely to be able to leverage internal and external sources of funding and in-kind contributions.

Central to the success of a cooperative approach, the PRPs and trustees need to be cognizant of the views of other interested parties. Early in the process, clear communication regarding the reasons for pursuing a coordinated, cooperative approach should be shared openly so that the public does not perceive that the parties are colluding to reach a preordained result or to let industry off the hook. The coordinated, cooperative approach affords opportunities for engaging public stakeholders in community outreach programs, which is essential for success.

PROPOSED PROCESS FOR DEVELOPING EFFECTIVE COOPERATIVE AND COORDINATED ERAS AND NRDAS

The requirement for USEPA to notify and coordinate with the trustee agencies regarding the release of hazardous substances, coupled with the fact that ERAs and NRDAs have common elements (e.g., conceptual site models, collecting and assessing environmental data, managing contaminated sites, estimating the need for restoration), might serve as a logical impetus for the coordination of these distinct processes. The key to successful coordination is rooted in 1st having a clear understanding of the goals and objectives of the 2 processes and then working within the established procedures for the conduct of each evaluation to identify opportunities to strengthen cooperation and coordination efforts.

Goals and objectives of ERA and NRDA

The goal of the ERA is to determine whether unacceptable risk exists and to develop feasible options to reduce risks to acceptable levels. The goal of the NRDA is to develop a defensible estimate of resource and service losses that leads to appropriately scaled restoration. In concert, these processes restore natural resources affected by oil or hazardous substance releases. A companion paper (Munns et al. 2009) encourages the consideration of an ecological services (habitat-level) endpoint for ERAs, which would enable greater coordination of ERAs and NRDAs in the area of assessment endpoints and response measures.

The PRPs have several goals associated with NRDA. Some have the goal to restore natural resources, either as part of the PRP company's policy of sustainability, or green initiatives, or simply to be good corporate citizen. The PRP also has a fiduciary responsibility to its shareholders. As part of this fiduciary responsibility, it is the PRP's duty to resolve its liability but not to overcompensate. These goals are not necessarily inconsistent with the trustees' goal (and statutory mandate) of obtaining a sufficient recovery to compensate the public for the injured natural resources.

However, to increase the likelihood of a successful, coordinated, cooperative ERA and NRDA, the USEPA (and the states and tribes), the trustees, and the PRPs must all work together in a productive manner. This can be accomplished by having the participants adopt a "check your affiliation at the door" approach in order to focus on the science, but this is often easier said than done given the adversarial underpinnings of the CERCLA process and the litigious attitudes that often result from fear of liability. At a minimum, participants should discuss, agree upon, and adhere to a set of rules of general conduct from the onset. Open communication and mutual respect might seem simple, but these could be among the 1st practices to breakdown if the process turns confrontational. Having all stakeholders share their goals and objectives and identify what they perceive to be problems at the outset will greatly improve the chances of a successful cooperative approach.

USEPA/trustee coordination

One important vehicle for realizing USEPA/trustee coordination in the ERA process is the Biological Technical Assistance Group (BTAG). The BTAG is a group of technical experts who advise and assist the risk manager with ecological studies developed as part of the RI/FS and removal action phases at a Superfund site (USEPA 1991). Through the BTAG, trustees provide technical input to USEPA that not only improves the ERA (and other ecological evaluations) but also furthers the trustees' overarching role as the guardians of trust resources. Cooperation in the BTAG includes the timely exchange of information between USEPA and the trustees to ensure that the selected remedy is technically adequate to protect natural resources. In addition, selected remedial alternatives that adequately protect and restore natural resources can potentially reduce the likelihood of expensive and time-consuming NRDA activities, which could delay negotiated settlements. As has been noted, an ERA conducted as part of the RI/FS process is not the same as an NRDA; however, a properly designed ERA can play a significant role in resolving questions and issues that would otherwise require lengthy NRDA-related proceedings and delay or even prevent a comprehensive settlement with PRPs (USEPA 1991).

Coordination of the ERA process

One of the key elements of the ERA process is the scientific–management decision point (SMDP), the formal decision by the risk assessment team (composed of the risk manager, the trustees, and the PRPs). The SMDPs occur at strategic milestones during the ERA process to review and approve the products generated thus far and, if necessary, redirect the effort. At the SMDP, information should be widely shared, and any decisions that are made should strive to reflect the concerns of all stakeholders. The risk manager and risk assessors, with the advice of the remaining BTAG members, decide whether the risk assessment is proceeding in a proper and acceptable direction or recommend changes. The SMDPs thus establish communication milestones at which information should be widely shared, and any decisions made should address the concerns of all stakeholders.

Similarly, assessment endpoints (i.e., environmental values that are to be protected; USEPA 1997) must be developed for the ERA. The development of assessment endpoints is a significant milestone that affects risk characterization and subsequent risk management decisions. Assessment endpoints that are selected in coordination with the trustees' requirements can provide an opportunity for the trustees and PRPs to gather information they might need in the NRDA and in the development of the ERA.

Suggestions that can facilitate coordination

Although they are distinct evaluation processes, ERAs and NRDAs are essentially parallel efforts that follow a common assessment path consisting of 1) a screening-level assessment

to identify the potential for harm or injury, 2) conceptualizations that define the link between a contaminant and an outcome (i.e., risk or injury), 3) development and execution of studies to assess outcome, 4) assessment, 5) outcome determination/decisions, and 6) action (i.e., remediation or restoration). The key elements of ERA and NRDA (Figure 1) and points in the processes at which opportunities for coordination exist are discussed in more detail below.

The ERA process under CERCLA

The ERA is an interdisciplinary process that draws upon environmental toxicology, ecology, and environmental chemistry, as well as other areas of science and mathematics. In 1999, the USEPA Risk Assessment Forum published *Guidelines for Ecological Risk Assessment* (USEPA 1998). The USEPA defines ERA as measuring the likelihood that adverse ecological effects might occur or are occurring as a result of exposure to 1 or more stressors. The guidelines incorporate 3 phases: problem formulation, analysis, and risk characterization. In the 1st phase, problem formulation, risk assessors evaluate goals and select assessment endpoints, prepare a conceptual model, and develop the plan to analyze the data that are available or are to be collected. During the analysis phase, assessors collect data and then evaluate the exposure to stressors to ascertain the relationship between stressor levels and ecological effects. In the 3rd phase, risk characterization, assessors estimate and describe risk.

The Superfund program implemented the above guidelines with program-specific guidance (USEPA 1997). The Superfund guidance was one of the 1st documents produced after the guidelines, is specific to the CERCLA process, and fulfills the objectives of the Office of Solid Waste and Emergency Response Directive 9285.7-17 that the ERA 1) identify and characterize current and potential threats to the environment from a hazardous substance release, 2) evaluate the ecological effects of alternative remediation strategies, and 3) establish cleanup levels in the selected remedy that will protect natural resources at risk.

The Superfund guidance provides an 8-step process for the conduct of an ERA that is intended to not only be responsive to programmatic directives but also focus the risk assessment. The 8 steps are:

1. Screening-level problem formulation and ecological effects evaluation
2. Screening-level preliminary exposure estimate and risk calculation
3. Baseline risk assessment problem formulation
4. Study design and data quality objectives
5. Field verification of sampling design
6. Site investigation and analysis of exposure and effects
7. Risk characterization
8. Risk management

The general NRDA process

Although the comprehensive "optional" NRDA regulations (USDOI 43 CFR 11) contain several procedural steps and requirements for the performance of a damage assessment, the damage assessment process basically consists of 5 major steps:

1. Preparation of the preassessment screen
2. Development of the assessment plan
3. Determining injury
4. Quantifying service losses
5. Evaluating and scaling restoration alternatives

Toward better coordination of NRDA and ERA

As with the risk assessment process used in performing an ERA, the damage assessment process is often viewed as linear. Nothing, however, prevents some of the steps from being conducted in parallel. For example, if there is information of a per se injury, such as a fish consumption advisory that limits fishing, the quantification of human use service losses that could result from the advisory could proceed while other analyses are being performed to determine injury. Similarly, some assessment teams have found it highly effective to begin identifying potential restoration opportunities early in the process. This helps maintain the focus of the assessment on the ultimate endpoint—the restoration. Moreover, an early focus on restoration might help identify restoration opportunities that are at considerable risk of being lost because of development. The identification of a desirable restoration project for which timing is critical might provide an additional incentive to keep the assessment process moving toward restoration and, in some cases, could lead to the purchase of protective options to prevent a particularly attractive restoration opportunity from being lost.

The parallels and the underlying similarity of data requirements in ERA and NRDA have led to effective coordination in some instances that the following paragraphs detail.

The trustees must prepare a preassessment screen to determine whether there is sufficient reason to conclude that a damage assessment should be conducted. This determination is made with the use of readily available information about the hazardous substance release and the potential for sufficient injury and service loss to have occurred to merit the performance of a damage assessment. This step provides an obvious opportunity for the sharing of information with the ERA process proceeding as part of the RI. Specifically, data from the ERA screening-level exposure and risk calculation steps would be very useful in this stage of the NRDA. Similarly, if a preassessment screen had been completed before the ERA preliminary screening as part of the RI, the data exchange could occur in the opposite direction.

The trustees develop an assessment plan to describe the activities that will be conducted during the remainder of the assessment process, with particular emphasis on the injury determination and service loss quantification. A review of various completed assessment plans reveals that a wide range of plans exist. Some have been quite large, such as the multivolume plan developed by the trustees for the Exxon Valdez spill. Others are more pro forma documents that describe the steps that will be completed but offer few details as to the specific activities to be conducted. In addition, in some cooperative assessments, a formal plan might not even be developed. Instead, technical memos are prepared to guide the assessment of injury and the quantification of services.

The preparation of the assessment plan offers another opportunity for coordination, with the ERA being conducted as part of the RI. For example, a conceptual site model that is prepared as part of the problem formulation step in the ERA process would be very informative and useful in planning the assessment activities. This model describes the pathways for exposure and identifies relevant receptors (natural resources). Other problem formulation steps consider how the contam-

ination is likely to affect the relevant resources within the specific ecosystem.

The assessment plan provides an opportunity for the trustees to describe the site's key resources of concern that will be addressed in the assessment process and should identify and specify explicit injury assessment endpoints (analogous to risk assessment endpoints in ERA). Once these key resources have been identified, there is an opportunity to develop coordinated measurement endpoints that address common assessment information needs (Munns et al. 2009). The assessment plan also presents an opportunity for trustees to describe how injuries will be linked to the natural resource services that will be quantified in the assessment. For example, the trustees could describe which injuries will be evaluated, the methods that will be used to evaluate those injuries, and the data that will be collected to address these needs, including "up-front" decision rules that describe how the results will be interpreted. The assessment plan is the place where the methods that will be used to quantify service losses are described. The more specific the information in the assessment plan, the easier it will be for the trustees to demonstrate why the data are needed and how they will be used to quantify service losses. An integral part of this process is the description of the quality control and quality assurance steps that will be taken to ensure the integrity of the assessment data.

To the extent that data have already been collected as part of the RI/ERA process, the assessment plan could include a description of how the data, assuming it meets the quality requirements of the NRDA, will be used. For example, if suitable sediment chemistry data exist, the assessment plan could describe where those were obtained, the extent and numbers of new samples to be collected, how the information could be used to determine whether sediments have been injured, and whether service losses have resulted from those sediment injuries. The description of how service losses will be quantified is an especially important part of the assessment plan because it will help provide the linkage between injury and the amount of restoration that might be required.

Finally, if human use services are being quantified as part of the assessment process, then the assessment plan should include a description of the services that will be addressed, the methods that will be used to quantify those services, and the data requirements for each of the proposed methods. Another opportunity for sharing data between the RI risk assessment and NRDA processes would arise with human use services. Specifically, data from the human health risk assessment conducted as part of the RI could be useful in quantifying the amount of angling that occurs in the assessment area. In situations in which it is necessary to collect site-specific data on the amount of fish consumed, it might be possible to coordinate that data collection with the data collection for recreational fishing. For example, in Lavaca Bay (see *Case Studies* below), 1 dataset was used in both the human health and the recreational fishing assessment. This led to considerable cost savings while still providing a robust dataset for use in each assessment.

The trustees must determine whether trust resources have been injured (injury determination) as a result of exposure to the hazardous substance or substances that are being addressed in the damage assessment. Injury is an adverse effect or behavioral abnormality that results from the exposure to a hazardous substance. Some injuries might be relatively straightforward. For example, violations of drinking water standards would constitute an injury to either the groundwater or surface water that was being used as a source for a community's water supply. Similarly, violations of surface water quality standards constitute an injury to surface water. Other injuries might require more sophisticated tests to determine whether an injury has resulted from exposure. For example, because sediment criteria exist for only a subset of chemicals, site-specific sediment toxicity tests might be needed to determine whether injury to the benthos is probable.

The injury determination step is an obvious example of where data from the ERA conducted as part of the RI process would be highly useful. As mentioned above, sediment chemistry data from the ERA process could be used to address injuries to sediment resources. Fish, bird, and other resource data could be used to determine whether those trust resources have been injured. ERA food web models might be particularly useful in helping to elucidate the exposure and injury potential to these upper trophic–level resources.

The trustees measure the magnitude of the service losses that have resulted from the injuries determined in the previous step. Services provide the key linkage to any economic valuation that is performed because services are the basis on which people value natural resources. Services also provide the metric that can be used in the quantification. For example, if HEA (see discussion below) is being used to quantify habitat losses, the quantification of service flows from the affected habitat is a critical ingredient in the formulation.

The interface between the ERA performed as part of the RI and the quantification stage of an NRDA is evolving. As some ERAs move to the use of services as measurement endpoints (Munns et al. 2009), the potential for integrating the ERA data in the service quantification phase of the NRDA increases substantially, inasmuch as both processes are much more likely to have similar metrics. Nevertheless, data gathered for the ERA as part of the RI could be useful even if they do not fully address services. For instance, in the DuPont Newport, Delaware, USA, NPL case (see *Case Studies* below), the trustees and DuPont were able to use the site's RI data to create spatial habitat/contaminant data models and to consider the effects of remedial actions and credit restoration that occurred onsite as part of the remedial actions.

A crucial step in service quantification unique to NRDA is the establishment of the baseline level of services. In USDOI regulations (43 CFR 11), baseline is defined as the level of services that would have existed but for the release of the hazardous substance. In the quantification phase, the task is to estimate the difference between the level of resource services that are found in the injured state and the level that would have existed if the release had never occurred (i.e., the baseline).

Determination of baseline is a crucial component of every damage assessment because it allows the isolation of the service losses caused by the release of hazardous substances, as opposed to degradation caused by factors that could reduce the production of services. Only service losses attributable to the hazardous substance injuries are compensable. For example, if habitat services in a riparian zone are degraded by cattle grazing, the riparian baseline value is reduced. Likewise, constructions of highways, urbanization, and stream channelization are other factors that might limit the level of services provided in a river system that have to be accounted for in the assessment process and separated from

the losses attributable to hazardous substance releases. The development of information on past land use practices, development of reference sites, and development of "background" in the ERA/RI could prove useful in determining a baseline.

The trustees evaluate and scale restoration alternatives to provide sufficient services to compensate for losses. In the past few years, HEA and its cousin, the resource equivalency analysis (REA) have been used for quantifying resource injuries and scaling restoration projects to the injuries that have been documented. The HEA is a specialized form of resource equivalency analysis that provides a common currency (called discounted service acre-years [dSAYs]) with which to compare the value of potential restoration projects as a credit against documented resource injuries (NOAA 2000). The primary utility of the HEA/REA models is the ability to scale restoration alternatives to lost resources and resource services quantified by the models in the "debit" step. Other models are typically employed when significant lost human use services are associated with site injuries. The trustees advanced the application of these modeling tools by explicitly accounting for differing habitat values for different conditions of habitat quality among the acres under consideration. The HEA/REA models are probably the most frequently used tools for ecological services scaling in NRDA. These tools can also be used to evaluate differential benefits and consequences of various response actions (Boers 2007).

CASE STUDIES

Although not common, there are several examples of Superfund sites in which the coordination of ERAs and NRDAs facilitated the achievement of objectives in a cost- and time-efficient manner. Three cases that highlight aspects of the type of and degree of coordination discussed in this paper are presented. In these examples, coordination occurred to varying degrees, sometimes to the advantage of the response process and sometimes to the benefit of the NRDA. In each case, coordination and the use of data for multiple purposes saved time and expense and led to the resolution of the site's hazardous substance issues.

Anaconda and Silver Bow Creek, Montana, USA

The Anaconda and Silver Bow operable units of the Clark Fork Superfund site, Montana, illustrate a situation in which the NRDA was completed before the ERA began. Considerable historical information about the upland, riparian, and aquatic resources had been collected during several studies before the initiation of the NRDA. In 1990, the State of Montana initiated site characterization studies for NRDA (see a comparative timeline of events at http://www.foxriverwatch.com/nrda/montana.html, accessed 8 November 2008). The case proceeded through trial and ultimately reached settlement (see a summary of the settlement agreements at http://www.doj.mt.gov/lands/naturalresource/lawsuithistory.asp, accessed 8 November 2008).

After the injury report had been filed, USEPA embarked on the ERA for the site. The data generated under the NRDA was reanalyzed for the ERA. Importantly, no new data collections were undertaken for the ERA. Similarly, the damage assessment was used to inform the selection of remedial actions.

Although the 2 processes were conducted by different parties at different times, the utility of data from the NRDA was fully compatible with the needs of the ERA. Although many stages of the processes were contentious and were influenced strongly by actual or potential litigation, in the end, the plans for remedy and restoration were coordinated and achieved a mutually satisfactory resolution.

DuPont/Christina River, Newport, Delaware

The DuPont/Christina River site in Delaware was placed on the Superfund NPL in 1990. During the planning of the remedial action for the site, DuPont, after discussions with the trustees, suggested to USEPA that it would be willing to implement addition improvements, above and beyond those required by USEPA, in the North and South Marsh Area operable units. DuPont performed the remediation and restoration construction, as designed cooperatively with the trustees and USEPA. Thus, they were able to integrate, at no additional cost, the response and restoration construction in those operable units. When the NRDA settlement was developed, the trustees used data generated by DuPont's consultant (Ecological Concerns, St. Michaels, Maryland, USA, with the Evaluation for Planned Wetlands methodology) to develop credit-side estimates of marsh service flow improvements from those habitat parcels. When these improvements were accounted for in the assessment, the restoration actions offset interim lost services in the affected assessment areas.

Lavaca Bay, Texas

This Lavaca Bay, Texas, site was begun by the trustees as an NRDA, but USEPA placed the site on the NPL in March 1994. Ultimately, this site could be the best example of early trustee involvement and coordinated response and restoration planning.

The trustees, USEPA, and the PRP started to edge away from an adversarial process and toward working together to resolve the site's problems. Fairly quickly, all of the parties came to 2 conclusions: 1) the science required for the RI was similar to what was required for the damage assessment and 2) the damage assessment should be conducted in parallel with the cleanup, not as a 2nd step after the remedial process.

Alcoa agreed to a reasonable worst-case scenario—wherein more conservative, environmentally protective estimates of resource injuries and losses are used—rather than spending additional time and money on injury assessment studies. With the use of information developed for the ERA, reasonable worst-case estimates were developed for injury categories, including birds, benthos, fish, terrestrial biota, groundwater, surface water, and lost human use (i.e., fishing closures). From these estimates, the parties then identified acres of habitat to restore and other restoration projects that would address the injuries. Each of the injury categories was documented in technical memoranda that all parties reviewed and that served as a roadmap for future restoration efforts. Oyster reef, salt marsh, and coastal prairie were constructed as the most appropriate habitats to be restored. Fishing piers and boat ramps were constructed to address the public's lost fishing opportunities.

CONCLUSIONS AND RECOMMENDATIONS

ERAs performed as part of CERCLA RIs should be closely coordinated with NRDAs performed by the trustees. Close coordination minimizes the risk of inefficiencies, such as duplicate data gathering, and facilitates the participation of PRPs in a cooperative process to accomplish both studies. Figure 1 depicts the similarities between the 2 processes and suggests coordination opportunities. Agreement on overlap-

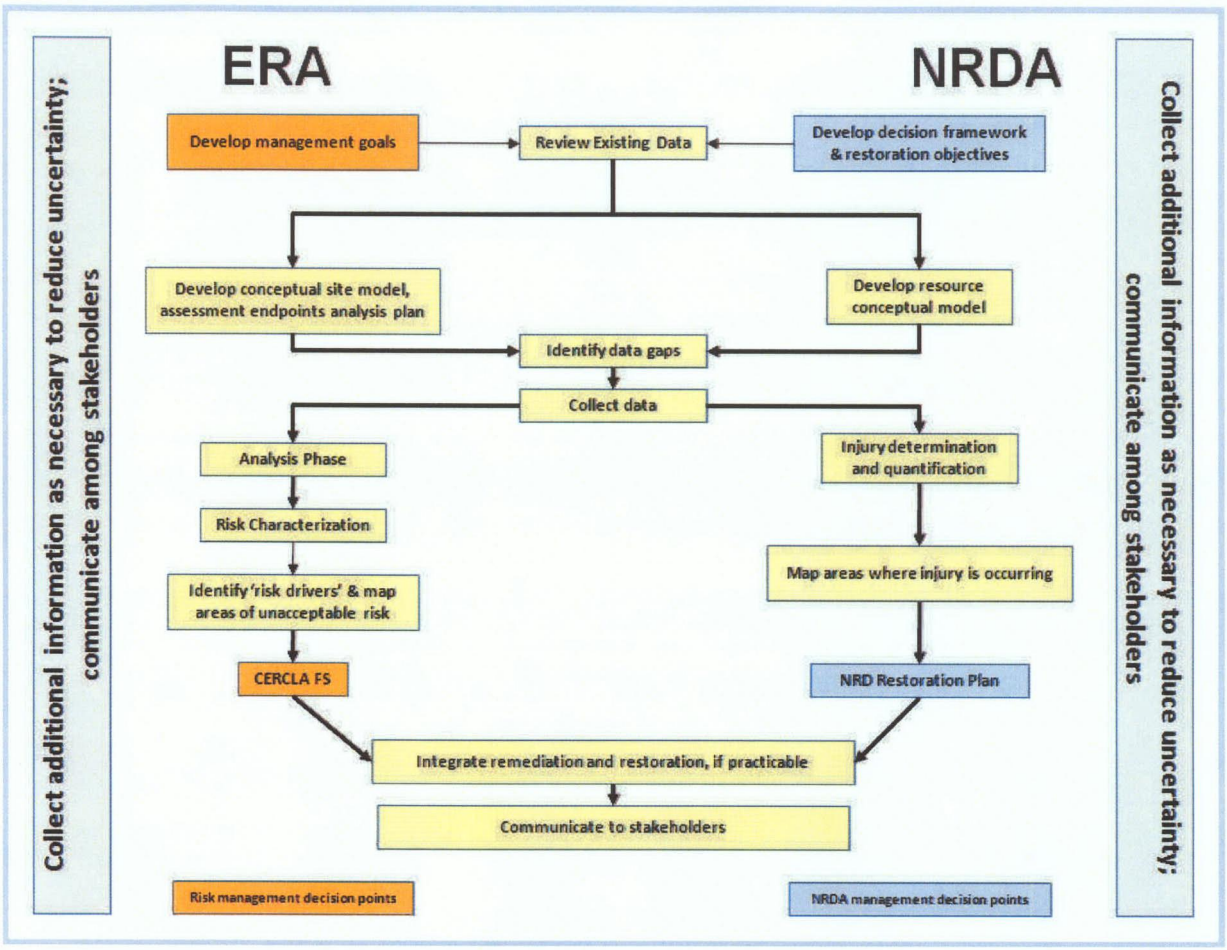

Figure 2. Idealized approach to coordinated ecological risk assessment (ERA) and natural resource damage assessment (NRDA).

ping fundamental components of both studies, such as site conceptual models, data quality objectives, and sampling and analysis plans can promote efficiency. No legal or policy barriers prevent this integration from occurring; to the contrary, existing law and policy specifically encourage coordination.

Trustees should be encouraged to become involved in the early stages of the RI and to work with USEPA to coordinate NRDA data needs with those of the RI. MOUs have proven to be a useful tool for structuring such a coordinated approach, and USEPA and the trustees should be encouraged to enter into such agreements as early as possible in the process. A closely coordinated effort on the part of USEPA and the trustees should also include the participation of PRPs in funding and conducting the studies, where appropriate. Such coordination can help the parties identify opportunities for combined assessment. Figure 2 presents an idealized coordinated process that could promote efficiency, combine data collection efforts, and lead to a more timely resolution of potential NRD liability issues.

Specific recommendations for enhancing coordination

The USEPA and the trustees should consider entering into MOUs at the outset of either an RI or an NRDA, whichever comes first. Normally the RI would be expected to precede the beginning of the NRDA, so the trustee agencies need to be alerted to the progress of the RI, and USEPA and the trustees should agree upon a working relationship as early in the process as possible.

Outdated guidance documents developed by the federal trustee agencies should be updated to reflect current practice and policy. The recently promulgated proposed CERCLA NRDA regulations should present an excellent opportunity to update trustee and USEPA guidance to conform to current practice and policy.

Practitioners should look for opportunities to formalize the process, which could include the incorporation of NRDA elements—such as injury determination—whenever possible into an Administrative Order on Consent that sets the terms for performance of the RI.

Acknowledgment—Lively exchanges among the participants occurred at the SETAC workshop on the nexus between ERA and NRDA conducted 18–22 August 2008 in Gregson, Montana. These discussions ultimately resulted in this paper. Although some of the authors of this paper are employees of governmental agencies, the ideas described herein do not necessarily reflect the policies of those agencies, and no official endorsement should be inferred. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

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Integrated Environmental Assessment and Management

Ecological Risk Assessment and Natural Resource Damage Assessment: Synthesis of Assessment Procedures

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Special Series

EDITOR'S NOTE:

This is 1 of 4 papers reporting on the results of a SETAC technical workshop titled "The Nexus Between Ecological Risk Assessment and Natural Resource Damage Assessment Under CERCLA: Understanding and Improving the Common Scientific Underpinnings," held 18–22 August 2008 in Montana, USA, to examine approaches to ecological risk assessment and natural resource damage assessment in US contaminated site cleanup legislation known as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

ABSTRACT

The Society of Environmental Toxicology and Chemistry (SETAC) convened an invited workshop (August 2008) to address coordination between ecological risk assessment (ERA) and natural resource damage assessment (NRDA). Although ERA and NRDA activities are performed under a number of statutory and regulatory authorities, the primary focus of the workshop was on ERA and NRDA as currently practiced in the United States under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This paper presents the findings and conclusions of the Synthesis Work Group, 1 of 3 work groups convened at the workshop. The Synthesis Work Group concluded that the different programmatic objectives and legal requirements of the 2 processes preclude development of a single, integrated ERA/NRDA process. However, although institutional and programmatic impediments exist to integration of the 2 processes, parties are capitalizing on opportunities to coordinate technical and scientific elements of the assessments at a number of locations. Although it is important to recognize and preserve the distinctions between ERA and NRDA, opportunities for data sharing exist, particularly for the characterization of environmental exposures and derivation of ecotoxicological information. Thus, effective coordination is not precluded by the underlying science. Rather, willing participants, accommodating schedules, and recognition of potential efficiencies associated with shared data collection can lead to enhanced coordination and consistency between ERA and NRDA.

Keywords: Ecological risk assessment Natural resource damage assessment CERCLA Assessment endpoints Hazard quotient

INTRODUCTION

The Society of Environmental Toxicology and Chemistry (SETAC) convened a workshop to address perceived and real difficulties in coordinating or harmonizing the practices of ecological risk assessment (ERA) and natural resource damage assessment (NRDA). Although ERA and NRDA activities are performed under a number of legal and regulatory authorities in the United States, the primary focus of the workshop was on ERA and NRDA as currently practiced under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA 1980). The ERA process systematically evaluates how likely it is that adverse ecological effects might occur as a result of exposure to 1 or more stressors (USEPA 1998). Ecological risk assessment can be prospective (prediction of the likelihood of future effects) or current (evaluation of the likelihood that observed effects are associated with current exposure to stressors). Natural resource damage assessment is a process by which injuries (i.e., measurable adverse changes) to natural resources are determined and quantified for purposes of establishing damages. Natural resource damage assessment is current, retrospective, and prospective, in that damages can be sought for natural resource injuries that are occurring, have occurred in the past, and are reasonably expected to continue in the future.

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In the workshop, similarities and differences in the ERA and NRDA processes were discussed. In this manuscript, we report the findings and conclusions from the Synthesis Work Group. We focus on the common and disparate elements of ERA and NRDA from assessment design through risk characterization or injury determination. The manuscript is organized to first highlight the objectives of the ERA and NRDA processes. Understanding these distinct statutory/regulatory objectives is fundamental to understanding the sometimes divergent scientific approaches that are relied upon in the 2 processes. Next, common steps in the design and framing of risk and injury assessment are compared and contrasted, including selection of assessment endpoints and response measures, estimation of exposure, spatial and temporal scope of assessment, use of background (reference) and baseline conditions, derivation and application of adverse response thresholds, and use of hazard quotients to characterize risk or injury. For each of the assessment steps, impediments to coordination are discussed and recommendations to improve coordination are provided.

Ecological risk assessment and NRDA share many common types of data needs and analytical constructs; however, the unique programmatic objectives and statutory/regulatory requirements of each can give rise to divergent data requirements and analytical approaches. Consequently, development of a single, integrated methodology that encompasses both ERA and NRDA programmatic needs is neither practical nor desirable. Nonetheless, opportunities exist for coordination of aspects of the 2 frameworks.

ERA AND NRDA: DIFFERING PROGRAMMATIC OBJECTIVES

Both ERA and NRDA (specifically, the injury assessment component of NRDA) consider and evaluate adverse effects of hazardous chemical exposure on ecological resources and ecosystem processes. However, the 2 assessment programs have different programmatic and scientific objectives that derive from their respective statutory and regulatory authorities and guidance. In the context of CERCLA, ERA is performed to inform response/remedial decision making. Natural resource damage assessment, on the other hand, is aimed at compensating the public for injury, destruction, or loss of natural resources. Compensation in NRDA is achieved through the restoration, rehabilitation, replacement, or acquisition of natural resources.

As a consequence of these distinct objectives, ERA seeks to answer fundamentally different questions from NRDA. Ecological risk assessment is focused on aiding remedial decision-makers in evaluating whether, and what, actions should be undertaken to manage risks to the environment. An ERA is therefore sufficient when it provides adequate information to support such decisions. Natural resource damage assessment, in contrast, is focused on quantifying the compensation necessary to restore injured resources to baseline and to offset past and future injuries to natural resources. An NRDA is therefore sufficient when adequate information is provided to support determinations regarding the nature and extent of natural resource injuries and to quantify the compensation required to offset losses to natural resources and their services.

Risk and injury

These programmatic distinctions between ERA and NRDA are reflected in the definitions and interpretations of the terms "risk" and "injury." The *Webster's New Collegiate Dictionary* (Webster 1979) defines risk as the probability of an adverse consequence. The U.S. Environmental Protection Agency (USEPA) defines risk as the expected frequency or probability of undesirable effects resulting from exposure to known or expected stressors and the likelihood that adverse ecological effects might occur or are occurring as a result of exposure to 1 or more stressors (USEPA 1998). In general use, "injury" is defined as damage or harm done to or suffered by a person or thing (American Heritage Dictionaries 2000). As employed in NRDA, "injury" has been defined in the US Department of the Interior (USDOI) regulations as a measurable adverse change in natural resources resulting either directly or indirectly from exposure to a discharge of oil or release of a hazardous substance. Specifically, injury means "a measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge of oil or release of a hazardous substance, or exposure to a product of reactions resulting from the discharge of oil or release of a hazardous substance" (USDOI 2005a, 43 CFR §11.14[v]). As defined by NOAA's NRDA regulations for assessment performed pursuant to the Oil Pollution Act, "Injury means an observable or measurable adverse change in a natural resource or impairment of a natural resource service" (US Department of State 2005, 15 CFR §990.30).

As highlighted by general definitions, risk incorporates the concept of frequency and likelihood of occurrence. As commonly practiced at contaminated sites, ERA often focuses on evaluating the reasonable likelihood (or potential) that an adverse effect has or would occur, typically over some area of concern. Less commonly, ERAs quantify the severity, duration, permanence, or probability of adverse effects. In contrast, the definition of injury adopted in NRDA does not explicitly include the concept of potential loss or harm. Rather, natural resource trustees must demonstrate the occurrence of injuries to natural resources, not just the potential for adverse effects, and a connection between the injury and a constituent in the release. These injuries then serve as the basis for quantifying damages. The NRDA process necessarily considers the severity, spatial extent, and temporal extent of injury to calculate appropriate measures of compensation.

Protectiveness and burden of proof

Another consequence of the distinct objectives of the 2 programs relates to the concept of "burden of proof." Because risk assessment is designed to guide risk management and remedy selection, it often includes assumptions intended to ensure that response actions implemented are protective of environmental receptors. However, determination of a specific severity or frequency of adverse effect might not be required. Furthermore, risk management involves tradeoffs between the precision and expense of analysis and its relevance to decision making. In the context of CERCLA response actions, a relatively high degree of uncertainty in risk estimates might be acceptable, depending upon the nature of the decision to be made.

In contrast, NRDA is compensatory. Natural resource damage assessment therefore requires determinations of the nature and extent of adverse changes in the chemical or physical quality or viability of a natural resource, not just the probability or likelihood of such adverse changes. The burden of proof in NRDA is based on the Trustees' obligation to

determine and quantify injured natural resources for purposes of quantifying the appropriate level of damages.

Overall, ERA is designed to inform response/remedial decisions; NRDA is designed to enable Trustees to seek compensation for the public to offset past and future natural resource losses. Whereas ERAs can conclude with the determination of potential ecological risks, NRDAs are designed to determine and quantify measurable injuries and service losses, a bar that is often higher than determining whether a risk of injury exists. Consequently, the information developed in an ERA generally is not sufficient for a complete injury assessment or quantification of damages as part of an NRDA.

ERA AND NRDA: TECHNICAL SIMILARITIES AND DIFFERENCES

Despite the programmatic distinctions discussed above, ERA and NRDA share several scientific elements. Understanding areas of commonality, as well as process-related distinctions in how common elements are implemented, will assist practitioners in identifying opportunities for efficient data sharing.

Common elements

Figure 1 illustrates some of the conceptual commonalities between ERA and NRDA. Both ERA and NRDA entail the identification and selection of assessment endpoints and response measures. Selection includes consideration of the level of biological organization (e.g., suborganism, organism, population, community), the specific receptor to be assessed, and the adverse responses to be evaluated. Both processes then proceed to an evaluation of risk or injury. That evaluation typically is based on characterizing site conditions and understanding the nature of receptor exposure to hazardous substances, establishing relevant adverse response thresholds, and determination and often quantification, of risk or injury. Despite these conceptual similarities, however, ERA and NRDA often employ divergent approaches that are, in part, a function of the differing programmatic objectives and requirements noted previously. Below, we discuss several of the conceptually shared elements of ERA and NRDA.

Assessment endpoints and response measures

Both ERAs and NRDAs have been undertaken with the use of assessment endpoints and biological response measures at multiple levels of biological organization (Figure 2). Suter et al. (2005) provides definitions of the various levels of biological organization; this concept is also discussed by USEPA (1998, 2003). Therefore, opportunities for coordination in the selection of assessment endpoints and response measures should be explored in the planning and conduct of ERA and NRDA, although it should be recognized that different endpoints and measures may be selected.

For ERAs at contaminated sites, the population is the most commonly targeted level of biological organization for development of assessment endpoints. The USEPA (1998) defines a population as "an aggregate of individuals of a species within a specified location in space and time." Population-level attributes (e.g., abundance, production, extirpation) can be measured directly in fish, amphibian, avian, and mammalian receptors evaluated in ERAs conducted at large sites. Community-level endpoints (e.g., benthic invertebrate surveys, fish surveys) are employed relatively routinely in ERA, particularly in aquatic systems. In some instances, USEPA recognizes the

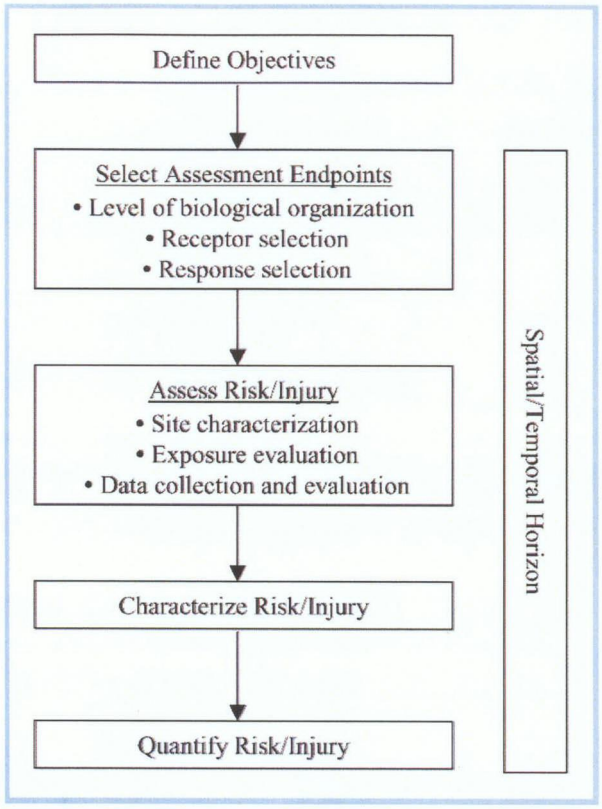

Figure 1. Conceptual similarities between ecological risk assessment (ERA) and the injury assessment phase of natural resource damage assessment (NRDA).

importance of protecting individual organisms—particularly special-status species, and organism-level endpoints and response measures are employed in these settings. For example, protection of the individual is mandated by the Endangered Species Act, Marine Mammal Protection Act, Bald Eagle Protection Act, and Migratory Bird Treaty Act (USEPA 1998). Suter et al. (2005) notes that, in practice, most ERAs focus on organism-level attributes of a population, and organism-level attributes (survival, growth, reproduction) commonly are used to infer population-level risks.

Compared with ERA, biological response measures are evaluated over a wider range of levels of biological organization in NRDA, although this represents a point of contention between trustees and responsible parties (who generally have favored a population/community approach). Natural resource damage assessment injury determinations commonly involve biological responses at the suborganism (e.g., enzyme induction, physiological change) and organism level (MacDonald et al. 2002; Cacela et al. 2005). Indeed, the USDOI NRDA regulations specifically identify a number of suborganism and organism biological responses as meeting regulatory definitions of injury. For example, USDOI (2005b, 43 CFR §11.62[f][1][i]) defines injury occurring if a biological resource or its offspring have "undergone at least one of the following adverse changes in viability: death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), or physical deformations." The regulations define fish neoplasm as an injury "when a statistically significant difference can be measured in the frequency of occurrence of the fish neoplasia when comparing

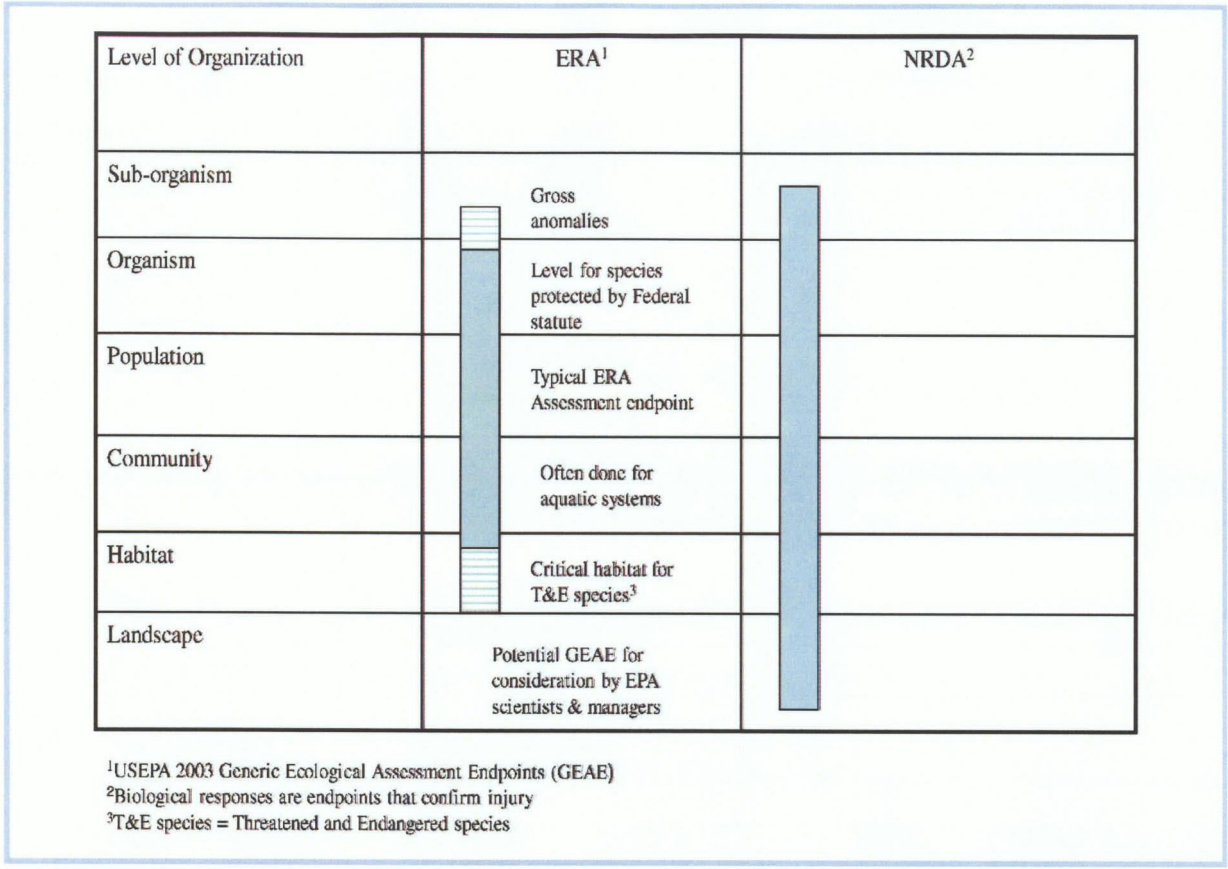

Figure 2. Levels of biological organization commonly employed in ecological risk assessment (ERA) and natural resource damage assessment (NRDA). Dark shading indicates levels of organization that are employed relatively frequently. Lighter shading indicates levels of organization less commonly employed.

population samples from the assessment area and a control area." Other examples of suborganism endpoints in the USDOI NRDA regulations include measurements of eggshell thinning, cholinesterase enzyme inhibition, delta-aminolevulinic acid dehydratase (ALAD) inhibition, and physical deformities (including external malformations, skeletal deformities, whole organ and soft tissue malformation, and histopathological lesions). Suborganism measures are not common in ERA, at least in part, because these sublethal measures have weaker causal links to organism processes of growth, survival and reproduction (Tannenbaum 2005; Emlen and Springman 2007).

In addition to the organism-, population-, and community-level endpoints and response measures common with ERA, NRDAs also assess habitat-level response measures, such as a reduction in the area or quality of habitat from the time of injury until the resource recovers to baseline, especially when habitat equivalency analysis (HEA) is used to scale restoration (NOAA 1997; Dunford et al. 2004). Habitat-level endpoints and response measures are less commonly used in ERA. USEPA (2003) suggests the use of habitat-level assessment endpoints (area and quality) only when contamination is present in critical habitat for Special Status species, although some states (e.g., Massachusetts) require evaluation of wetland habitat as part of the ERA.

As the discussion above illustrates, an area of commonality does exist between ERA and NRDA when considering certain levels of biological organization. The focus on organism, population, and community endpoints and response measures in both ERAs and NRDAs could therefore present the greatest opportunity for common data to be collected and analyzed. On the other hand, because suborganism and habitat measures in NRDAs are less commonly employed in ERAs, there is less chance that ERAs will collect usable data for NRDAs at these levels of biological organization. A companion paper (Munns et al. 2009) encourages the consideration of an ecological services (habitat-level) endpoint for ERAs that might enable greater coordination of ERA and NRDA in the area of assessment endpoints and response measures.

Receptor selection

Both ERAs and NRDAs require the selection of receptors, variously referred to as indicator species, receptors of interest, receptors or resources of concern, representative species, or representative natural resources. The simple term "receptor" is used here to refer to the species or environmental media (e.g., groundwater, surface water) that are evaluated in an ERA or NRDA. The term "receptor" does not occur in the USDOI NRDA regulations, which refer to natural resources (e.g., surface water, fish, wildlife). In ERAs, receptors are generally selected to represent the major feeding guilds or trophic levels at a given site (e.g., the benthic invertebrate community; fish populations; wildlife species representing piscivores, omnivores, and/or invertivores). Receptors often are chosen to be among the most susceptible (i.e., most highly exposed and most toxicologically sensitive; USEPA 1998) of the species likely to inhabit a given site (i.e., the risk drivers), with the assumption that extrapolation of risk conclusions regarding these receptors

are protective of other, less susceptible species. Surrogate species can also be selected in ERA on the basis of data availability (e.g., although green herons might forage at the site, great blue herons may be selected as a surrogate species because of greater availability of data on life history and ecotoxicity). Natural resource damage assessments, however, are less likely to select purely surrogate species and are more likely than ERAs to select multiple representatives of each resource guild because of the trustees' need to determine and quantify injuries to natural resources in the assessment area.

It is no surprise then that ERAs and NRDAs conducted at the same site might select receptors that only partially overlap, given their inherently different objectives—namely risk management decisions, as opposed to compensation for injury to natural resources. Ecological risk assessments must ensure that the most susceptible species within each relevant feeding guild—that is, the likely risk drivers—are represented so the remedy that is selected is protective of all species likely to inhabit the site. In contrast, NRDA receptor choices revolve around the trustees' need to determine and quantify the spectrum of injuries to resources present at the site to ensure adequate and effective compensation (e.g., restoration). One opportunity for coordination and cooperation between ERA and NRDA in receptor selection could lie in the early involvement of trustees during ERA problem formulation, to explore whether the receptors selected for ERA will also support NRDA data needs.

Exposure analysis

The accurate estimation of chemical exposure from the release of hazardous substances to the receptor is a fundamental aspect of both risk and injury analysis. Often the measurement used to reflect such exposure in ERA is the estimated environmental concentration (EEC).

Multiple tools for estimating chemical exposures can be used, ranging from simplistic deterministic characterizations of EECs (e.g., maximum value, upper confidence limit of the mean exposure [95 UCL]) for the various exposure media (soil, surface water, sediment, biota) to more complex probabilistic characterizations (e.g., Monte Carlo analysis, geostatistical/geoanalytical tools [kriging, Thiessen polygons]). Estimated environmental concentrations for receptor-specific exposure areas or individual point estimates are then compared with toxicity thresholds (most common for ERA) or dose–response relationships (often used in NRDA, less often employed in ERA) to evaluate the potential for risk and injury determination. Ecological risk assessments focus on estimating current and anticipated postremediation exposures. Natural resource damage assessments generally include determination of past and future exposure in that past and future injuries are included in injury and damage quantification.

Substantial opportunity for coordination between ERA and NRDA exists (and often occurs) for characterizing chemical exposure to receptors, although, as discussed below, the spatial and temporal scope of such characterizations might not wholly overlap. The obvious benefit of such coordination is a reduction of redundant data collection and chemical analyses and more cost-effective and timely exposure analysis.

Spatial and temporal scope

A fundamental distinction in the design and conduct of assessments in ERA and NRDA is the spatial and temporal domain of analysis. CERCLA ERAs are components of remedial investigations (RIs), which are designed to inform remedial decision making by identifying areas of contamination, if any, that exceed a designated threshold or otherwise pose an unacceptable risk. Generally, the designation of areas of unacceptable risk is more important than the magnitude of the risk, how long the risk existed, or how long the risk will remain after the completion of remedial action. After risk analysis, remedial alternatives for mitigating the identified unacceptable risk are evaluated. As a practical matter, however, quantification and delineation of all areas that pose unacceptable risk might not be needed to reach a final decision regarding remediation. In addition, ERAs often use multiple response measures and receptors (i.e., multiple lines of evidence) for an area of contamination to improve the confidence of the determination of acceptable or unacceptable risk, rather than determine the need for independent (and likely duplicative) remedial action to address the unacceptable risk associated with each individual response measure and receptor.

Natural resource trustees, on the other hand, seek to understand the spatial extent of contamination and natural resource injuries if the public is to be fully compensated for losses to trust resources. Measurable adverse effects and resultant injury might occur at levels deemed "acceptable" (i.e., not subject to remedial actions) to risk managers. In such instances, the spatial scope of the NRDA could extend beyond the study area considered in an ERA. In addition, trustees also might need to investigate gradients of exposure and injury from the source of contamination to determine the extent and magnitude of injury or service loss. Each resource category (and "receptors" within each resource category) could have a different spatial extent of injury that would need to be characterized independently. Thus, assessment of the spatial extent of resource injuries will often entail more data and analysis than the spatial extent of ecological risk performed in an ERA.

The temporal domain of ERAs and NRDAs also differ in that NRDA practitioners assess injury and damages in the past, present, and future—spanning from a specified historical point in the past (or the time of the release, or both) into the future, until the injured natural resource and the services it provides return to baseline conditions. CERCLA ERAs typically are focused on evaluating current risks and less often future risk (i.e., post-remediation, if reasonable future land use might lead to increase exposure and risk). Natural resource damage assessments typically require a broader suite of data inputs and further analysis than is used in most ERAs because of the need in NRDA to evaluate conditions in the past, as well as projecting future injuries (especially quantification of impact–recovery curves).

For determination of current and future risk/injury, there is opportunity to coordinate and share spatial and temporal information between ERA and NRDA. However, to determine the full extent of natural resource injuries and service losses, the spatial description of injuries in the NRDA often includes a description of the continuum of injury assessed in a comprehensive spatial and temporal context. Consequently, the spatial and temporal characterization of injury in NRDA is often more complex than is employed in ERA.

Background versus baseline

In evaluating adverse effects of chemical contaminants on ecological receptors, ERAs often include a comparison of site data with background (reference) information intended to

provide a reasonable expectation of conditions that would be expected at the site but for releases of hazardous substances (USEPA 1994, 2002). Background information may be obtained from nearby locations that are ecologically similar to the contaminated site, from prerelease historical data (if available), or from statistical approaches (USEPA 1994). In selecting background locations, USEPA (1994) recommends consideration of factors such as the similarity of physical, chemical, and biological characteristics. Although not necessary to determine ecological risk from chemical exposure, chemical concentrations at background locations are used in ERA to identify site-related chemicals (USEPA 2002), and background response levels (e.g., reference growth and survival in sediment toxicity tests) are used to develop the threshold for unacceptable risk (i.e., significant difference from background response; Long and Chapman 1985; Menzie et al. 1996).

"Baseline" in CERCLA NRDA is the condition that would have existed in an assessment area had a release of hazardous substance not occurred (USDOI 2005a, 43 CFR §11.14[e]). As with ERA, NRDA baseline entails consideration of physical, chemical, and biological factors that might influence baseline conditions (USDOI 2005c, 43 CFR §11.72). Baseline conditions in NRDA are determined to establish the amount of injury and service loss (in different locations and at different points in time) that resulted from the release. The loss is equal to the difference between the injured state and the baseline state. Thus, baseline typically will be defined for all resource categories and response measures (Cacela et al. 2005). Although analogous to the use of background concentrations and response levels in ERA to assess unacceptable risk, ERA often makes a binary determination of acceptable (reference) or unacceptable response; rarely is the magnitude of the difference from the reference response used to quantify the severity of risk.

Another difference between background and baseline is that in NRDA, baseline conditions include consideration of anthropogenic factors that can influence environmental conditions (e.g., the presence of dams, land uses, and habitat quality; Barnthouse and Stahl 2002; Burger et al. 2007). Thus, baseline encompasses all factors, natural and anthropogenic, that might influence the services provided by a biological resource. As a result, information needs for NRDA baseline determination often are greater than the requirements for background determination in ERA.

Although opportunities for coordination related to background and baseline information exist (e.g., selection of reference locations), characterization of background conditions in ERA often will be insufficient to meet the needs of baseline determination for NRDA.

Derivation and application of adverse response thresholds

Ecological risk assessment and NRDA both rely on the derivation and application of adverse response thresholds to inform determinations of risk or injury. The basic tools used to develop these response thresholds are likewise shared by the 2 processes and derive from the field of ecotoxicology. Potential ecological effects associated with a chemical stressor in the environment can be evaluated with the use of a spectrum of tools, ranging from literature-based toxicity information to site-specific studies. However, as with the other assessment components discussed above, specifics of threshold derivation and application might differ between ERA and NRDA because the uses of the information (whether literature-based or site-specific) reflect differing programmatic objectives. For example, whereas ERAs generally use adverse effect thresholds to delineate areas of concern sufficient to inform risk-based decision making, NRDA injury assessments often will use the underlying ecotoxicological data to reach conclusions about both the nature and magnitude of injuries to specific natural resources. These differences are most pronounced in the development and use of toxicity reference values (TRVs).

Toxicity reference values are commonly used in ERA as toxicity thresholds for delineating acceptable and unacceptable risk and for translating protective levels to target media concentrations (i.e., clean-up levels or remedial goals). Toxicity reference values can be species specific or, more often, are developed for broad classes of receptors (e.g., benthic invertebrates, avian wildlife). The process of deriving TRVs typically entails a literature search and evaluation (sometimes of already compiled TRVs, such as ecological soil screening levels [EcoSSL], Sediment Quality Guidelines, Water Quality Criteria, Oak Ridge National Laboratory guidance) to identify the most applicable study or studies that will serve as the basis for the TRV (Sample et al. 1996). Ideally, response information would be translated from underlying studies with the use of a complete dose–response curve, which enhances understanding of changes in organism response with environmental contaminant levels. However, much toxicity literature is still reported in the form of no observable adverse effect levels (NOAELs) and lowest observable adverse effect levels (LOAELs).

The greater reliance on NOAEL/LOAEL data to derive TRVs, as opposed to quantitative effects concentrations derived from dose–response curves (e.g., effect concentration [EC_x] values), can be a significant barrier to coordination between ERA and NRDA. This greater reliance is associated with the intended use of the information (i.e., the derivation of "safe" vs "unsafe" environmental conditions). Exposure concentrations greater than TRVs only indicate situations in which injury or potential unacceptable risk could occur; however, information on the magnitude of response with increases in environmental concentrations is lost in this simplification. Adoption of alternative approaches would improve the use of toxicity information by incorporating the dose–response curve, such as the use of regression statistics to calculate effective concentrations to a certain percentage of test organisms (EC_x). Although increased transparency in this area would benefit both processes substantially, the magnitude information is particularly critical for the NRDA process, wherein response magnitude is necessary for injury quantification.

The use of NOAEL/LOAEL data to derive TRVs has other limitations and scientific drawbacks beyond their binary (threshold) nature (see, e.g., Stephan and Rodgers 1985; Hoekstra and Van Ewijk 1993; Chapman et al. 1996; Newman 2008). NOAEL and LOAEL values are largely artifacts of the design of the experimental dosing regimes and are not standardized across different studies to a specified magnitude of adverse effect. As a result, 2 studies could identify substantially different NOAELs/LOAELs; yet, the results of both studies may be pooled in calculating TRVs. For example, Moore and Caux (1997) compared regression approaches to pairwise hypothesis testing. The authors used 24 datasets that adequately fit at least 1 regression model and had at least 2 replicates per concentration. Hypothesis testing techniques applied to these same data produced NOAELs

that corresponded to EC_xs of between 10% and 40% effect. The LOAELs represented EC_x values of up to 76%. Crane and Newman (2000) also examined the correspondence between EC values and NOAELs. In 9 sets of round robin tests for fish growth effects, the median NOAEL value corresponded to an EC_x level of 10.5%. However, the ranges were large, with EC_x values between 3% and 34% effect. This level of uncertainty regarding degree of protectiveness and the magnitude of effect associated with exceedances of TRVs is rarely discussed in ERAs and greatly restricts their applicability in NRDA.

Effects assessment in both ERA and NRDA can rely heavily on ecotoxicological information to evaluate the effects of a stressor on the environment. Both processes utilize literature and site-specific data to define potential effects. However, limitations associated with the derivation and use of TRVs (as a single toxicity threshold) in ERA limits the ability to incorporate this ecotoxicological information into the injury assessment process. Both practices can benefit from greater use of more definitive effects assessment tools to capture the nature of dose–response relationships. When TRVs are derived in ERA, NRDAs would benefit from more comprehensive presentation of the available underlying toxicological information in the effects assessment and improved documentation of the rationale for selection of critical studies. This may include the tabulation and evaluation of results from a broad range of published studies to facilitate analysis of concurrence, differences and trends across studies, test species (i.e., species sensitivity distributions), and test durations. Despite the acceptance of NOAEL/LOAEL data as a decision-making tool in ERA (likely because uncertainty associated with the use of NOAEL/LOAEL is manageable within the ERA decision process, e.g., the cost to support more precision might not be necessary to adequately support remedial decision making), adoption of alternative analytical approaches and greater transparency of the underlying ecotoxicological information would lead to greater coordination and consistency between ERA and NRDA.

Applicability of hazard quotients to characterize risk and injury

The standard approach for calculating and communicating ecological risk is deterministic hazard quotients (HQs). The HQ for each chemical–receptor combination is calculated by dividing the EEC or estimated dose to an organism by the TRV:

$$HQ = EEC/TRV \quad (1)$$

$$HQ = Dose/TRV \quad (2)$$

An HQ of 1 is used as the threshold for unacceptable ecological risk (USEPA 1997).

Despite the common use of the HQ approach in ERA, HQs have relatively little applicability to the NRDA process. This largely derives from 3 factors: 1) the spatial and temporal horizon of EECs adopted in ERA might not address the full range of NRD needs, 2) the TRV derivation procedures and associated threshold-based approaches to inferring toxicity might not be readily applicable to NRD data needs, and 3) translation of HQ to a meaningful quantification of injury might not be possible. Because the 1st 2 factors have been discussed previously, we focus here on the limitations of the use of HQs to quantify injury.

Broadly speaking, HQs solely provide information on whether estimated exposure concentrations are below or greater than a derived response threshold. They provide no (or potentially misleading) information on the magnitude (i.e., quantification) of adverse effect (Pastorok et al. 2002). For example, HQ = 10 does not imply 2 times more effect (risk or injury) than HQ = 5 because the slopes of the underlying dose–response curves are not factored into the simple ratios. Similarly, HQ = 2 for 1 compound or species is unlikely to be associated with a similar magnitude of adverse effect for a different compound or species (again, because the underlying toxicological response data are neither normalized across compounds and species, nor are they generally retained in the analysis). Finally, the previous discussion on the broad range of adverse effects associated with NOAELs and LOAELs used to derive TRVs raise questions regarding the use of HQ = 1 as the threshold for significant adverse effects.

Natural resource damage assessment entails both the determination and quantification of natural resource injuries. As noted above, HQs do not provide quantitative information regarding the degree of anticipated adverse effects. As a result, HQs generally might not be sufficient to address both the injury determination and quantification phases in NRDA, and reliance on their use in ERA greatly limits the opportunity for coordination between ERA and NRDA.

Alternatives to deterministic HQs are available that would provide for greater consistency between ERAs and NRDAs (Sorensen et al. 2004). For example, where appropriate data are available, probabilistic risk methods can be used to represent variability in exposure concentrations (EEC) and in ecotoxicological data (TRV), and dose–response regression models can be used in lieu of threshold values to derive TRVs (MacIntosh et al. 1994). Such approaches enable calculation of the distribution of expected adverse responses (or, alternatively, probabilities of exceeding specific adverse effects levels at different locations and times). Alternatively, the use of ranking schemes that categorize the concentration response of different stressors might provide for an enhanced degree of risk quantification (Landis and Wiegers 1997). Finally, it should be emphasized that HQs are not required in ERA. On the contrary, USEPA (1998) guidelines for ERA and others (Menzie et al. 1996) advocate use of multiple lines of evidence to evaluate each assessment endpoint. Lines of evidence, such as field- and laboratory-based approaches to assessing exposure and adverse effects at contaminated sites might be directly applicable to NRDA and might encourage greater coordination between ERA and NRDA.

CONCLUSIONS

Ecological risk assessment and NRDA consider the potential adverse effects of hazardous substance exposure on ecological resources and ecosystem processes and share a number of data inputs and analytical constructs. For example, both types of analysis generally entail development of an understanding of exposure to hazardous substances and consequent responses of environmental receptors to such exposures. However, the unique programmatic objectives of the 2 processes also give rise to divergent data requirements and analytical approaches. As a result, the development of a single, integrated assessment methodology is neither practical nor desirable.

Although institutional and programmatic impediments exist to integration of the 2 processes, opportunities to coordinate technical and scientific elements of the assessments are being capitalized on at a number of locations. Indeed, it is increasingly common to find some measure of integration or coordination between ERA and NRDA at contaminated sites. Although it is important to recognize that distinctions might exist in the spatial and temporal domains of the 2 analyses, as well as the nature of data needed to make decisions, opportunities for data sharing exist, particularly for the characterization of environmental exposures, as well as the derivation of ecotoxicological information for a number of response measures. In sum, effective coordination is not precluded by the underlying science. Rather, willing project participants, accommodating project schedules, and recognition of potential efficiencies associated with shared data collection can all lead to enhanced coordination and consistency between ERA and NRDA.

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Biographical Sketch

Don Pitts
Don Pitts is the Director of the Environmental Assessment, Response and Restoration Program at Texas Parks and Wildlife Department in Austin, Texas. In conjunction with the other state and federal co-trustees, he is responsible for developing and recovering NRDA claims, managing NRDA recoveries, overseeing Responsible Party restoration project construction and managing trustee implementation of restoration projects.

Mr. Pitts first became involved in NRDA activities in 1990 as part of the Trustee team monitoring the effects of a large oil spill in Galveston Bay and has been involved at some level with all Texas NRDA's since that time. Mr. Pitts has been involved in multiple nationwide Trustee and Industry workgroups, panels and presentations dealing with Cooperative Natural Resource Damage Assessment process and participated as a Trustee representative in the negotiated rulemaking associated with the Texas Oil Spill Response and Prevention Act NRDA Rules. He has served as the Lead Administrative Trustee for a number of NRDA cases for both waste sites and spills.

He earned his M.S. in Wildlife and Fisheries Science and a B.S. in Marine Biology from Texas A&M University.

Biography: Richard Seiler

Richard Seiler is the Program Manager of the Natural Resource Trustee Program of the Texas Commission on Environmental Quality (TCEQ). Since 1995, he has been responsible for directing all of the agency's Natural Resource Trustee activities under the authorities of the Natural Resource Damages provisions of the Comprehensive Environmental Response Compensation and Liability Act, the Clean Water Act, the Oil Pollution Act and the Oil Spill Prevention and Response Act. Prior to this, he served for three years as a Project Manager in the agency=s Damage Assessment and Restoration Program and four years in the Houston regional office of the Texas Water Commission as a Field Inspector in the Environmental Monitoring and Assessment Program.

Mr. Seiler has directed the Trustee activities of the TCEQ with a focus on coordination and cooperation between state and federal agencies, response agencies and members of the regulated community. Under his direction, the Natural Resource Trustee Program of the TCEQ has adopted a cooperative, restoration-based approach to resolving NRD liability at corrective action sites in Texas, emphasizing restoration of injured resources over litigation and monetary damages.

In 2005, Richard was appointed by the Secretary of the Interior to serve on the Natural Resource Damage Assessment and Restoration Advisory Committee to provide advice to the Department of the Interior on its Natural Resource Damage Assessment and Restoration activities, authorities, and responsibilities. The Committee developed numerous recommendations on actions that can be undertaken to achieve faster, more efficient, and more effective restoration of injured natural resources by promoting cooperation among natural resource trustees and potentially responsible parties in lieu of costly and time consuming adversarial processes.

Mr. Seiler represented the TCEQ in the negotiated rule-making of the State=s Natural Resource Damage Assessment rules for coastal oil spills and was responsible for the development of the Memorandum of Agreement between the TCEQ and state and federal Trustees related to the Ecological Risk Assessment procedures of the Texas Risk Reduction Program Rules, which was adopted as rule by the agency.

Mr. Seiler holds a Bachelor of Science degree in Agricultural Economics and a Master of Science degree in Wildlife and Fisheries Sciences from Texas A&M University.

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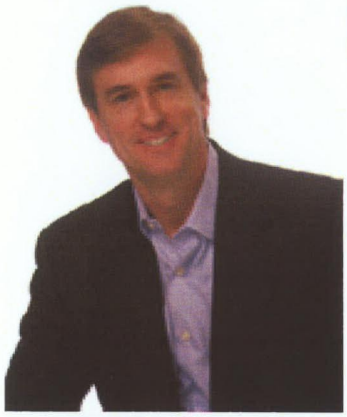

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BAR MEMBERSHIPS

- State Bar of Texas Environmental and Natural Resources Law Section (Chair-Elect 2010)
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EDUCATION

- University of Texas at Austin (B.A./Philosophy; 1989)
- University of Houston Law Center (J.D., 1992)

Mr. Gregg is a Principal in the Austin, Texas office of Beveridge & Diamond, P.C. and Co-Chair of the Firm's Oil and Gas section. His legal career has been devoted to the practice of environmental law. Over the course of his 17-year career, he has worked with most of the significant federal and Texas environmental programs. Most recently, his practice has focused on environmental issues involving contaminated properties, including the management of state and federal CERCLA matters, RCRA compliance counseling, transactions involving contaminated properties, counseling on state and federal regulatory cleanup programs, and state and federal natural resource damage claims. Mr. Gregg has also counseled clients on all manner of air, water and waste management regulatory issues (permitting, enforcement, and general compliance matters). He has represented national and international clients within the chemical, petroleum refining, and natural gas production, processing and transportation industries, among others, as well as various local and regional manufacturing interests.

Mr. Gregg began his career at the Texas Commission on Environmental Quality (TCEQ), where he provided program development and legal/litigation support for various air, water quality, and industrial and hazardous waste programs. From the TCEQ, he moved into private practice, focusing on environmental regulatory counseling and environmental litigation, until his move in-house to an international energy company in 2001. Mr. Gregg managed that company's nationwide MTBE MDL groundwater contamination and products liability lawsuits and provided legal defense on CERCLA cost-recovery and contribution matters across the country. He also managed the legal issues associated with the company's remediation portfolio, coordinated the company's environmental due diligence activities, and structured, drafted and negotiated the environmental components of the company's acquisitions, divestitures, and other transactions.

PROFESSIONAL HIGHLIGHTS

Mr. Gregg is a former Chair of the Houston Bar Association's Environmental Law Section and current Chair-Elect of the Texas Bar's Environmental and Natural Resources Law Section. He is listed in *The Best Lawyers in America* in the specialty of Environmental Law and has been distinguished as a "Super Lawyer" in Environmental/Land Use Law by *Texas Monthly* and *Law & Politics* Magazine. He is AV Peer Review Rated.

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EXPERIENCE

Patricia Finn Braddock has been a partner in Fulbright & Jaworski L.L.P.'s Austin office since 1992. As a member of the firm's Environmental Department, her practice focuses on permitting and enforcement matters before federal and state regulatory agencies, and associated litigation, in all aspects of environmental law, but primarily in the area of air pollution control. She is co-chair of the firm's Climate Change Practice.

From 1974 through 1987, Ms. Braddock worked in senior positions at Texas' environmental regulatory agencies on air, water quality and solid waste disposal permitting and enforcement matters. Through her thirty five years of government service and private practice, Ms. Braddock has developed a comprehensive working knowledge of both the legal and technical aspects of federal and state permitting, enforcement and remediation programs.

Ms. Braddock has extensive experience in handling matters before federal, state and local environmental agencies, including the United States Environmental Protection Agency, the United States Department of Justice, the Texas Commission on Environmental Quality, the Texas Railroad Commission, and local programs in Harris County and the City of Houston. She regularly counsels clients on environmental regulatory requirements and environmental aspects associated with business transactions.

She has represented clients in complex Superfund contribution and cost recovery actions and assisted clients in obtaining approvals under state remediation programs, such as the Texas Voluntary Clean-up Program. She also conducts and supervise environmental compliance audits.

In addition, Ms. Braddock has represented clients in litigation brought by EPA and the DOJ in various states as well as in toxic tort litigation.

REPRESENTATIVE EXPERIENCE

- Operating and managing contractors of the Pantex Plant in federal and state agency proceedings involving environmental aspects associated with plant operations for over ten years
- Refineries in citizen suits under the Clean Air Act and the Clean Water Act
- A Trustee in Bankruptcy regarding environmental conditions at a state

superfund site

- Four major mid-stream oil and gas companies in air permitting and compliance issues at sites in Texas
- Three oil and gas companies in lawsuits alleging violations of the federal Clean Air Act brought by EPA and the DOJ in different states
- Companies in obtaining air permitting authorizations for a number of innovative technology pilot plants, including a demonstration of highly-engineered photosynthetic organisms to convert CO_2 into liquid energy and pollution control equipment for capturing CO_2 from coal-fired power plants
- Energy companies in the permitting of coal-fired power plants and natural gas-fired power plants

PROFESSIONAL ACTIVITIES AND MEMBERSHIPS

- Central Texas Chapter of the Air and Waste Management Association, former chair
- American Bar Association
- State Bar Association
- Natural Resources Section of the American Bar Association
- Environmental and Public Law Section of the State Bar Association
- Texas Bar Foundation, Fellow
- Adjunct professor in Air Pollution Law at the University of Texas School of Law in Austin (1991)
- Texas Environmental Law Super conference, Planning Committee (2000 - 2010)
- University of Texas CLE Carbon and Climate Change seminars, Planning Committee and Speaker (2007 - 2009)

PROFESSIONAL HONORS

- Texas Board of Legal Specialization, certified in Administrative Law
- *PLC Which Lawyer* (2009)
- *Chambers and Partners USA,* Top tier in Texas (2005 - 2010)
- *The Best Lawyers in America* (1999 - 2010)
- *Who's Who in American Law* (2006 - 2009)
- "Texas Super Lawyers," *Law & Politics* (2003 - 2009)
- "Top-Notch Environmental lawyer," *Texas Lawyer* (2007)
- "Best of Business Attorneys," Environmental, *Austin Business Journal* (2005)

PUBLICATIONS

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- *Texas Environmental Law Handbook,* Government Institutes, Contributing Author (1989, 1991, 1993, 1996 and 2000); Editor (1996, 2000)
- Author of numerous papers for the State Bar of Texas, the University of Texas CLE, and firm seminars

SPEECHES

- Frequent lecturer at state and national conferences on federal and state air quality issues

EDUCATIONAL BACKGROUND

1974 - J.D., St. Mary's School of Law
1971- B.A., American University

Pat was admitted to practice law in Texas in 1974.

CIVIC INVOLVEMENT

- Travis County Volunteer Legal Services, Board of Directors (2006 - 2008)
- Has represented bono clients in divorces, Social Security appeals and before the US Army Discharge Review Board

22ND ANNUAL TEXAS ENVIRONMENTAL SUPERCONFERENCE

CLIMATE CHANGE LITIGATION "WHEN I SEE AN ELEPHANT FLY"

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TABLE OF CONTENTS

Page

I. Introduction 1

II. Litigation to force GHG Regulation under the Clean Air Act 1

A. Massachusetts v. EPA 1

B. New York v. EPA 2

C. California v. General Motors Corp 2

D. Public Citizen v. Texas Commission on Environmental Quality 2

III. Litigation to Force Regulation of GHGs Under Other Federal Statutes 3

A. Endangered Species Act 3

B. National Environmental Policy Act 3

C. Federal Land Policy and Management Act 4

IV. Litigation Challenging GHG Regulation Under the CAA 4

A. Endangerment and Cause or Contribute Findings 5

B. Standards for Light-Duty Motor Vehicles 6

C. Reconsideration of the Johnson Memorandum 7

D. GHG Tailoring Rule 7

1. Step 1: January 2, 2011 through June 30, 2011: 8

2. Step 2: July 1, 2011 through June 30, 2013: 8

3. Step 3: Scheduled to begin on July 1, 2013: 8

4. Implementation Schedule 9

V. Tort-Based Climate Change Litigation 9

A. Connecticut v. American Electric Power Co. Inc 9

B. Comer v. Murphy Oil USA, Inc 10

C. Native Village of Kivalina 11

VI. Conclusion 12

CLIMATE CHANGE LITIGATION

I. INTRODUCTION

Between 2002-2008, proponents of the global warming theory began pushing hard for national legislation to regulate greenhouse gas ("GHG") emissions in the United States. When the U.S. Congress was unable to reach a consensus about whether sound science indicated that GHGs adversely affect human health, welfare or the environment and, if so, how these emissions should be regulated, the proponents sought regulation of GHGs at the state level and through existing federal environmental programs. The proponents also turned to the federal and state court systems for support and achieved a stunning victory in the decision of the United States Supreme Court in *Massachusetts v. EPA*, 549 U.S. 497 (2007).

In the aftermath of *Massachusetts*, proponents of global warming, which has evolved into the concept of climate change, expanded their efforts to force regulation of GHGs through litigation. In late 2008, the presidential election brought like-minded political appointees to federal agencies, such as the U.S. Environmental Protection Agency ("EPA"), where regulation of GHGs began to be incorporated extensively in existing environmental programs. Opponents of the climate change theory have been galvanized to halt or at least slow-down the pace of climate change requirements being promulgated into federal regulations and began challenging these regulations in federal and state courts. The result has been an intense fight to control the issue and an incredible proliferation of lawsuits in federal and state courts.

It is not practical to identify and discuss the full range of climate change cases in a single paper; consequently, I have selected a few significant categories and provided a brief discussion of the key issues.

II. LITIGATION TO FORCE GHG REGULATION UNDER THE CLEAN AIR ACT

Prior to the 2008 presidential election, climate change proponents in states along the East Coast and West Coast of the United States implemented a well-timed strategy to force regulation of GHGs under the federal Clean Air Act ("CAA") and/or to highlight the reluctance of the Bush Administration to adopt such policies. The first three cases presented below are examples of this national strategy. The fourth case is an example of a climate change lawsuit brought in a state court with a related purpose in mind.

A. *Massachusetts v. EPA*

Massachusetts v. EPA was the groundbreaking lawsuit in which proponents succeeded in forcing EPA to consider regulation of GHGs in the agency's existing environmental programs. In a 5-4 decision, the U.S. Supreme Court held that carbon dioxide ("CO_2") and other GHGs from motor vehicles are "air pollutants" as defined by the federal CAA. The Supreme Court directed EPA to reevaluate its prior decision not to regulate GHG emissions from new motor vehicles under the CAA. *See Massachusetts v. EPA*, 549 U.S. 497 (2007).

A year later, EPA had still not taken action on the Court's directive. In frustration, Massachusetts sought to enforce the Supreme Court's mandate requiring EPA to decide whether

GHGs should be regulated under the CAA. *See Massachusetts v. EPA*, No. 03-1361, Order, Document No. 0121688432 (D.C. Cir. June 26, 2008). In response, EPA issued an Advanced Notice of Proposed Rulemaking ("ANPR") requesting comments on its analyses and policy alternatives to regulating GHGs under the CAA. 73 Fed. Reg. 44,353 (July 30, 2008).

B. *New York v. EPA*

In August 2008, less than a month after EPA issued the ANPR, the State of New York filed a lawsuit against EPA in the U.S. District Court for the District of Columbia Circuit challenging EPA's decision not to include GHGs in new source performance standards ("NSPS") for petroleum refineries under the federal CAA. *See New York v. EPA*, No. 08-1279 (D.C. Cir. Filed August 2008). Although EPA subsequently revised the NSPS for petroleum refineries without adding GHGs to the regulation, this lawsuit has been inactive since its filing. *See* 40 C.F.R. pt. 60, subpt. Ja.

C. *California v. General Motors Corp.*

In 2006, the California Attorney General filed suit against General Motors Corp., Ford, Chrysler and the North American outlets of Toyota, Honda and Nissan in the U.S. District Court for the Northern District of California alleging a public nuisance was being caused by the substantial amount of GHGs being emitted from the automakers' cars, which caused climate change, resulting in millions of dollars in damages to the state, including increased air pollution, a decline in the snowpack, and coastal erosion. *See California v. General Motors*, No. 07-16908 (9th Cir. 2007).

The defendants filed early motions to dismiss, which the Court granted in September 2007 on grounds that the issues raised were political questions were reserved for the President and Congress. The court noted that the cars were being sold legally, there was no allegation that emissions from the cars violated any current laws or regulations and that climate change had many contributing factors. In November 2007, when Jerry Brown became the California Attorney General, his office appealed the district court decision to the Ninth Circuit. However, the appeal was dropped on June 19, 2009, for the stated reason that the recent policy changes by the Obama Administration indicated progress on related issues, such as the fuel economy standards and EPA's endangerment findings, which are discussed below.

D. *Public Citizen v. Texas Commission on Environmental Quality*

On October 6, 2009, Public Citizen filed a lawsuit against the Texas Commission on Environmental Quality ("TCEQ") seeking to require the agency to regulate CO_2 and other GHGs in air permits issued by the agency. The petition alleged that the TCEQ's permit rules barred consideration of CO_2 and global warming, despite the 2007 Supreme Court decision in *Massachusetts v. EPA* holding that GHGs, including CO_2, are air pollutants, and despite a provision in the Texas CAA directing the TCEQ to regulate contaminants that threaten public health, safety and welfare by all practical and economically feasible methods.

When the petition was filed, it was generally believed that Public Citizen was seeking a ruling to require the TCEQ to regulate GHGs in air permits for new coal-fired power plants, the largest industrial sources of CO_2 in Texas. However, no further action has been initiated in this

case, so the lawsuit may have been timed primarily to coincide with the December 2009 United Nations Climate Change Conference in Copenhagen.

III. LITIGATION TO FORCE REGULATION OF GHGS UNDER OTHER FEDERAL STATUTES

A. *Endangered Species Act*

The Endangered Species Act ("ESA") requires the government to identify and then eliminate threats to a species. Although the ESA has not historically focused on air emissions, it has now become a key battleground in the use of litigation to regulate GHGs. The Center for Biological Diversity, a small non-profit activist group, has been particularly successful in protecting imperiled species through a strategy of relentless lawsuits and has forced federal agencies to consider potentially adverse effects of climate change on such species.

The *Center for Biological Diversity v. United States Department of the Interior* is the groundbreaking lawsuit that forced the first listing of a mammal as threatened due to global warming under the ESA. In February 2005, the Center for Biological Diversity, joined by Greenpeace and the Natural Resources Defense Council, petitioned the U.S. Department of the Interior ("DOI") to have the polar bear protected from global warming under the ESA, which the environmentalists argued were becoming extinct because Arctic sea ice off the coast of Alaska upon which the bears depend for hunting, mating and travel, was disappearing at an unprecedented rate due to global warming. In effect, the lack of GHG regulation presented the primary threat to the polar bear. *See Center for Biological Diversity v. Kempthorne* (N.D. Cal. December 2007).

Under the ESA, the Secretary of the DOI was required to respond within 90 days of receiving the petition, but the Secretary declined to initiate action. The three environmental groups then submitted a 60-day notice under the citizen suit provisions of the ESA, but the DOI again declined to list the polar bear, arguing that the incremental buildup of GHGs in the atmosphere could not be considered a "taking" of a polar bear, in the sense that "taking" typically means directly killing or destroying habitat through development.

As a result, the three environmental organizations filed a lawsuit in the U.S. District Court for the Northern District of California and eventually reached a settlement with the DOI in which the agency agreed to announce that climate change threatened (but did not endanger) the polar bear. The DOI continued to maintain that regulation of GHGs was not justified in federal permitting decisions based on the ESA. Subsequently, the State of Alaska and several oil and gas companies sued the DOI (unsuccessfully) to overturn the listing of the polar bear as a threatened species.

B. *National Environmental Policy Act*

Numerous lawsuits have been filed against the DOI for alleged violations of National Environmental Policy Act ("NEPA") for failing to consider the potential impact of GHGs. The following case is an example of these lawsuits and illustrates the significant standing hurdle faced by parties filing climate change-based lawsuits.

In 2008, three non-profit activist groups and one tribal government filed a NEPA and ESA lawsuit against the DOI for failing to account for climate change when deciding to grant oil and gas leases off the Alaska coast. *See Center for Biological Diversity v. Department of the Interior*, (D.C. Cir. April 2008). On August 10, 2009, the U.S. Court of Appeals for the District of Columbia Circuit held that the petitioners lacked substantive standing and explained that *Massachusetts v. EPA* stood only for the proposition that where a harm is widely shared, a sovereign, suing in its individual interest, has standing to sue where that sovereign's individual interests are harmed, wholly apart from the general harm.

In comparison Massachusetts claimed that EPA's failure to regulate GHGs was causing actual erosion of the State's shoreline. In this case, the tribal government did not actually own the offshore land that was alleged to be affected. In addition, the Court found that the petitioners could not meet the traditional Article II standing test of showing a concrete and particularized injury that is caused by, or fairly traceable to the act challenged in the litigation and is redressable by the court. Injury to the Arctic from climate change was too speculative because it might occur at some point in the future and too generalized because it affected the world at large. Causation was too tenuous because the chain of events between the leases and climate change involved too many third parties.

C. *Federal Land Policy and Management Act*

Given the tremendous expansion of oil and gas exploration and production activities in the Western States and the focus of environmental organizations on halting this expansion, litigation that challenges leases based on climate change issues has increased exponentially. The following is a good example of the climate change claims being made in such litigation.

In 2008, the Bureau of Land Management ("BLM") granted 92 oil and gas leases in New Mexico. The Western Environmental Law Center filed a lawsuit in the Federal District Court for the District of New Mexico alleging that the leases were improper under the Federal Land Policy and Management Act, the Mineral Leasing Act, NEPA and the DOI's Secretarial Order 3226 (January 19, 2001) because the BLM had failed to address GHG emissions. Specifically, the oil and gas exploration and operations would release GHGs from equipment venting, coal beds, the transport and refining on oil and gases, and heat and electricity generation. *See Bravos et al. v. Bureau of Land Management* (D. N.M.. filed January 2009). The plaintiffs based their standing to sue on the alleged impairment of their use and enjoyment of lands affected by the leases. The case remains pending.

IV. LITIGATION CHALLENGING GHG REGULATION UNDER THE CAA

A number of industry groups, limited government organizations and free-market advocacy groups have challenged each step of EPA's process in regulating GHGs, including EPA's decision that GHG emissions endanger human health and welfare. The challengers hope that if one rule is struck down, the agency's entire climate program will collapse like a deck of cards.

A. *Endangerment and Cause or Contribute Findings*

The *Massachusetts* case addressed Section 202 of the CAA which governs mobile source emissions and states: "The Administrator shall by regulation prescribe . . . standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521. The Supreme Court had directed EPA to make an endangerment determination so that the agency could decide whether standards for GHGs from new motor vehicles or new motor vehicle engines should be established.

On April 20, 2009, EPA proposed endangerment and cause-and-contribute findings for GHG emissions from mobile sources, a necessary prerequisite to EPA's ability to adopt rules limiting GHG emissions. 74 Fed. Reg. 18,886 (Apr. 24, 2009). On December 14, 2009, EPA issued final findings that: (1) current and future projected concentrations of six key, well-mixed GHGs constitute air pollution that threatens public health and welfare; and (2) combined emissions of the six GHGs from new motor vehicles and motor vehicle engines are air pollutants contributing to this condition of air pollution. See 74 Fed. Reg. 66496-66546 (Dec. 15, 2009). EPA's findings were based in large part of the 2007 report of the United Nations Intergovernmental Panel on Climate Change ("IPCC"), which has been criticized for inaccuracies and flawed assumptions.

Numerous companies, limited government organizations and free-market advocacy groups objected to the scientific basis for the endangerment findings due to EPA's heavy reliance on the IPCC report to justify the endangerment and cause and contribute findings. Within weeks, the first lawsuits against EPA's final findings were filed in the U.S. Court of Appeals for the District of Columbia Circuit by the American Chemistry Council, the Coalition for Responsible Regulation, Inc., the Energy Recovery Council and the Fertilizer Institute. In February 2010, fourteen additional companies and trade associations also filed lawsuits against EPA's endangerment and cause and contribute findings; specifically, the American Farm Bureau Association, the American Iron & Steel Institute, the American Petroleum Institute, the Competitive Enterprise Institute, Gerdau Ameristeel, Linder, National Association of Manufacturers, National Mining Association, Ohio Coal Association, Peabody Energy Co., Portland Cement Association, the State of Texas, Utility Air Regulatory Group, and the State of Virginia.

The above petitions were consolidated into *Coalition for Responsible Regulation, et al v. EPA*, No. 09-1322, which remains pending in the U.S. Court of Appeals for the District of Columbia Circuit. At the time that this paper was prepared, the petitioners had not yet filed briefs detailing their arguments; however, based on prior challenges to EPA GHG regulations, the likely challenges will be that EPA moved too quickly with regulations in light of the serious and substantive questions about the scientific basis for the "endangerment" finding, the pending challenges to four other rulemakings based on the endangerment finding, and the broader challenge that EPA is requiring permits for air pollutants that Congress did not intend to regulate under the PSD program.

B. *Standards for Light-Duty Motor Vehicles*

As a result of the final endangerment and cause and contribute findings, EPA was primed to issue final GHG emissions regulations for light-duty motor vehicles. EPA and the National Highway Traffic Safety Administration had proposed GHG emission standards for Model Year 2012 to 2016 light-duty vehicles on September 15, 2009, and finalized the rules on April 1, 2010. The final regulation will raise the national corporate average fuel economy ("CAFÉ") standard to 35.5 miles per gallon by 2016 and impose an average carbon dioxide limit of 250 grams per mile per vehicle that year.

The standards for light-duty vehicles are the keystone for regulation of stationary sources under the PSD and Title V air permitting programs because EPA had announced on April 2, 2009, that the PSD permitting requirements would apply to a newly "regulated pollutant" at the time that a regulatory requirement to control emissions takes effect. Since these standards will impose the first mandatory, nationwide restrictions on GHG emissions when they take effect on January 2, 2011, including requirements for stationary sources, the rule has been challenged by numerous companies and organizations that would not appear to be directly affected by the motor vehicle standards.

On June 29, 2010, the Competitive Enterprise Institute and members of the Ohio Coal Association filed lawsuits in the U.S. Court of Appeals for the District of Columbia Circuit seeking review of EPA's final rule establishing standards for light-duty motor vehicles. Civil Cases Nos. 10-1143 and 10-1144, respectively. On July 6, 2010, petitions were filed with the U.S. Circuit Court of Appeals for the District of Columbia by the American Chemistry Council, American Forest and Paper Association, Energy-Intensive Manufacturers' Working Group on Greenhouse Gas Regulation, National Association of Manufacturers, National Mining Association, Portland Cement Association, U.S. Chamber of Commerce and the State of Texas.

The petitions of the American Chemistry Council, American Forest and Paper Association, Energy-Intensive Manufacturers' Working Group on Greenhouse Gas Regulation, National Association of Manufacturers, National Mining Association, Portland Cement Association, U.S. Chamber of Commerce were joined by the National Association of Manufacturers' petition was joined by the American Frozen Food Institute, American Petroleum Institute, Brick Industry Association, Corn Refiners Association Inc., Glass Packaging Institute, Michigan Manufacturers Association, Mississippi Manufacturers Association, National Association of Home Builders, National Federation of Independent Business, National Oilseed Processors Association, National Petrochemical and Refiners Association, Specialty Steel Industry of North America, Tennessee Chamber of Commerce and Industry, West Virginia Manufacturers Association, and Wisconsin Manufacturers and Commerce. The petition of the State of Texas was joined by the States of Alabama, Nebraska, North Dakota, South Carolina, South Dakota and Virginia.

The above petitions were consolidated into the matter entitled *Coalition for Responsible Regulation, et al v. EPA*, No. 09-1322, in the U.S. Court of Appeals for the District of Columbia Circuit. At the time that this paper was prepared, the petitioners had not yet filed briefs detailing their arguments, however, based on prior challenges to EPA GHG regulations, the likely challenges will be that EPA moved too quickly with regulations in light of the serious and

substantive questions about the scientific basis for the "endangerment" finding, the pending challenges to four other rulemakings based on the endangerment finding, and the broader challenge that EPA is requiring permits for air pollutants that Congress did not intend to regulate under the PSD program.

There are also numerous supporters of the rule, including automobile manufacturers and environmental groups, which have filed motions to intervene in the cases brought by other industry groups. The supporters were joined by the City of New York, the State of California and 12 other states.

C. *Reconsideration of the Johnson Memorandum*

On April 2, 2010, EPA published its final "Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs" that affirmed that PSD permitting requirements apply to a newly regulated pollutant at the time a regulatory requirement to control emissions of that pollutant "takes effect" (rather than upon promulgation or the legal effective date of the regulation containing such a requirement). EPA also provided guidance on the applicability of the PSD and Title V permit programs to GHGs upon the anticipated promulgation of EPA regulations establishing limitations on emissions of GHGs from vehicles under Title II of the CAA. *See* 75 Fed. Reg. 17,004, *et seq.* (April 2, 2010).

Eighteen lawsuits challenged this policy were filed with the U.S. Court of Appeals for the District of Columbia Circuit by many of the same legal entities that challenged EPA's endangerment and cause and contribute findings. A coalition of states including Texas, Alabama, South Carolina, South Dakota, Nebraska, North Dakota, Virginia and Mississippi filed a petition by June 30, 2010 challenging EPA's determination. Industry challengers include the Portland Cement Association; a coalition led by the National Association of Manufacturers; the Ohio Coal Association; the National Environmental Development Association's Clean Air Project; the Missouri Joint Municipal Electric Utility Commission; the U.S. Chamber of Commerce; the National Mining Association; the American Farm Bureau; Peabody Energy Co.; the Utility Air Regulatory Group and the Energy-Intensive Manufacturers Working Group, the American Iron, Steel Institute, Gerdau Ameristeel Corp., the Clean Air Implementation Project; a coalition led by the limited-government Southeastern Legal Foundation; and the Coalition for Responsible Regulation Inc.

Petitioners are not required to detail their arguments to the court until future briefings are due, however, petitioners are expected to challenge EPA's determination on the grounds that the CAA is not the appropriate legal mechanism for regulating GHGs from stationary sources.

The Center for Biological Diversity filed a petition objecting to delay in implementation of PSD requirements for the largest stationary sources beyond January 2, 2011. *See Center for Biological Diversity v. EPA*, No. 10-1115 (D.C. Cir. filed May 28, 2010).

D. *GHG Tailoring Rule*

On September 23, 2009, within days of proposing the standards for Model Year 2012 to 2016 light-duty vehicles, EPA proposed a role that would phase-in the federal regulation of six GHGs from large stationary sources under the PSD and Title V permitting programs over a

period of years. On May 13, 2010, EPA issued the final "GHG Tailoring Rule", which was published in the Federal Register on June 3, 2010. *See* 75 Fed. Reg. 31,513 *et seq.* (June 3, 2010).

The agency proposed a scaled-back approach for the regulations, initially limiting them to new sources producing more than 100,000 tons per year ("tpy") of GHG emissions and to existing sources that increase their GHG emissions by more than 75,000 tpy. The phase-in will be implemented in three steps:

1. **Step 1: January 2, 2011 through June 30, 2011:**

A source that is already subject to PSD (due to its new or increased non-GHG emissions) must address Best Available Control Technology ("BACT") for GHGs of 75,000 tpy or more of CO_2 equivalent ("CO_2e").

A source that is subject to Title V must address applicable requirements for GHGs for any amount of GHGs that are being emitted. At this time, the only applicable requirement is the reporting requirement that became effective on January 2, 2010.

2. **Step 2: July 1, 2011 through June 30, 2013:**

A new stationary source of 100,000 tpy or more of CO_2e, or a modification at an existing major source that increases GHG emissions by 75,000 tpy or more of CO_2e, must undergo PSD review, including a BACT review, regardless of whether the source is subject to PSD due to its non-GHG emissions.

A source of 100,000 tpy or more of CO_2e must obtain a Title V permit, even if the source would not otherwise be subject to Title V.

3. **Step 3: Scheduled to begin on July 1, 2013:**

EPA is not promulgating applicability criteria at this time. Instead, the agency will establish Step 3 requirements pursuant to a new rulemaking in 2011.

EPA justified the heightened PSD and Title V major source thresholds and implementation schedule for GHGs based on three legal doctrines:

1. the agency has the discretion to apply statutory requirements differently than a literal reading would indicate in order to avoid "absurd results";

2. the agency may apply statutory requirements in a way that avoids impossible administrative burdens under the doctrine of "administrative necessity"; and

3. the agency is authorized to implement statutory requirements in accordance with the doctrine of "one-step-at-a-time".

The major environmental organizations have indicated that they do not intend to challenge the final GHG Tailoring Rule (with the exception of the Center for Biological

Diversity, which is discussed below). Industry is put in the unusual and awkward position of challenging a rule that limits the scope of EPA's regulation of GHGs. It is probably for this reason that many of the companies and trade organizations that have challenged other EPA GHG regulations have chosen not to challenge the final Tailoring Rule. Still, the Southeastern Legal Foundation, an Atlanta-based limited government organization, filed a petition (on June 3, 2010) on behalf of itself, 14 House Republicans, and a coalition of business groups including forest products, transportation and other industries, asking the U.S. Circuit Court of Appeals for the District of Columbia to review the rule. Also, on June 30, 2010, Gerdau Ameristeel US Inc. and the American Iron and Steel Institute filed petitions with the U.S. Court of Appeals for the District of Columbia Circuit asking the court to review the GHG Tailoring Rule. Opponents have until August 2, 2010, to challenge the final GHG Tailoring Rule.

4. Implementation Schedule

In addition to objecting to the basis of the final GHG Tailoring Rule, the National Mining Association objected to EPA's schedule for implementing the requirements because it indefinitely exempts smaller sources of GHGs. *See Nat'l Mining Ass'n v. EPA*, No. 10-1120 (D.C. Cir. filed May 28, 2010). As noted above, the Center for Biological Diversity filed a petition objecting to delay in implementation of PSD requirements for the largest stationary sources beyond January 2, 2011. *See Center for Biological Diversity v. EPA*, No. 10-1115 (D.C. Cir. filed May 28, 2010).

V. TORT-BASED CLIMATE CHANGE LITIGATION

Several high-profile lawsuits have been brought in federal court against numerous industrial co-defendants based on claims under the federal common law and state common law where diversity is involved.

The first hurdle in these cases is whether there is a "case or controversy" as required by Article III of the Constitution which obligates the federal courts to hear only suits in which the plaintiff has alleged some actual or threatened harm to him or herself, as a result of a putatively illegal action. The second hurdle is whether the plaintiffs have standing. In order to have standing in federal court, a plaintiff must adequately establish: (1) an injury that is concrete and particularized as well as actual or imminent and not just conjectural or hypothetical, (2) a causal connection between the injury and the defendant's wrongful action, and (3) the likelihood that the requested relief will redress the injury. *See Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992).

Federal district courts have largely dismissed climate change lawsuits on the grounds that the matter presents a non-justiciable political question, however, appellate courts have been more willing to consider the causes and effects of climate change. The cases discussed below are the most significant climate change lawsuits brought under federal common law, state common law and mixed federal and state common law in different federal circuits.

A. *Connecticut v. American Electric Power Co. Inc.*

This case involved the consolidation of two lawsuits brought in 2004 by eight state attorneys general, the City of New York, and three land trusts against six electric utilities under

the **federal common law** for a public nuisance alleged to have been caused by GHGs emitted from the defendants' power plants. Plaintiffs claimed that the defendants had practical, feasible and economically viable options for reducing CO_2 emissions from the plants without significantly increasing the cost of electricity, and sought an injunction to cap the amount of CO_2 emissions from the power plants and to require reductions by a set percentage in the following years.

On September 16, 2005, without even reaching the standing issue, the federal district court dismissed the lawsuit on the grounds that the plaintiffs' claims presented non-justiciable political questions that required the court to identify and balance economic, environmental, foreign policy, and national security interests of a transcendentally legislative nature. *See Connecticut v. Am. Elec. Power Co.*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005). Plaintiffs appealed to the Second Circuit and oral arguments were held on July 7, 2006, however the matter was delayed pending the Supreme Court's review in *Massachusetts.*

On September 22, 2009, more than two years after the Supreme Court's decision in *Massachusetts*, a two judge panel for the U.S. Court of Appeals for the Second Circuit vacated and remanded the district court's ruling, holding that the plaintiffs had standing to bring their claims under the federal common law of nuisance. Specifically, the Second Circuit noted that the plaintiffs were not asking the court to fashion a comprehensive and far reaching solution to global climate change. Instead, the plaintiffs were seeking to limit GHG emissions from six power plants on the grounds that the emissions constitute a public nuisance that they allege has caused, is causing and will continue to cause them injury. *See Connecticut v. Am. Elec. Power Co., Inc.*, 582 F.3d 309 (2d Cir. 2009), *en banc petition for rehearing denied* March 2010.

B. *Comer v. Murphy Oil USA, Inc.*

In 2005, private property owners along the Mississippi Gulf coast filed a lawsuit in the Southern District of Mississippi against oil and chemical companies alleging that the defendants' operations emitted GHGs that contributed to global warming which caused a rise in sea levels and increased the intensity of Hurricane Katrina. These factors combined to destroy their private property and public property that was useful to them. The plaintiffs sought compensatory and punitive damages based on **Mississippi common law** of public and private nuisance, trespass, negligence, unjust enrichment, fraudulent misrepresentation and civil conspiracy. Plaintiffs invoked the district court's subject matter jurisdiction under 28 U.S.C. § 1332(d)(2) based on **diversity of citizenship** in class actions.

The federal district court dismissed plaintiffs' claims on the grounds that the plaintiffs lacked standing and that the case presented a non-justiciable political question. *See Comer v. Murphy Oil USA, Inc.*, No. 1:05-CV-00436 (S.D. Miss. Aug. 30, 2007). The plaintiffs filed their notice of appeal in September 2007, and the case was assigned to a three-judge panel of the U.S. Circuit Court of Appeals for the Fifth Circuit.

On October 16, 2009, three weeks after the Second Circuit decision in *Connecticut v. American Electric Power Co., Inc.*, the three-judge panel reversed the district court's decision in part and ruled that private property owners have standing to bring state common law claims of public and private nuisance, trespass, and negligence against the companies and that such claims

do not present non-justiciable political questions. However, the panel affirmed the dismissal of the unjust enrichment, fraudulent misrepresentation and civil conspiracy claims. *See Comer v. Murphy Oil USA, Inc.*, 585 F.3d 855 (5th Cir. 2009).

The defendants appealed the remand of the nuisance, trespass and negligence claims arguing that the plaintiffs had not demonstrated the harms were fairly traceable to the defendants' actions. Of the 16 active judges on the court, seven had recused themselves from consideration of the case, presumably because of ties that could have been construed as presenting conflicts of interest. The remaining nine voted last year to let the entire court consider the case en banc which vacated the decision of the three judge panel. *See Comer v. Murphy Oil USA, Inc.* (5th Cir. 2009) (Partially reversed dismissal, en banc petition for rehearing granted Feb. 2010).

After accepting the case, an eighth judge recused herself so that the court no longer had a quorum. After reviewing briefs from the plaintiffs and defendants, the remaining eight judges ruled that they lacked a quorum, meaning they could not review or reinstate the panel's decision. Instead, they stuck with the district court's decision that the plaintiffs lacked standing for a lawsuit because the ties between emissions, global warming and the severity of Hurricane Katrina were too tenuous. *See Comer v. Murphy Oil USA, Inc.*, No. 07-60756 (5th Cir. May 28, 2010).

The only recourse at this point is the United States Supreme Court, however, at the time this paper is being prepared, it is unknown whether the Court would be willing to accept the case.

C. *Native Village of Kivalina*

On February 26, 2008, the Native Village of Kivalina, an Inupiat Eskimo village, and the City of Kivalina filed a lawsuit in the U.S. District Court for the Northern District of California against twenty-four oil, energy and utility companies alleging that as a result of global warming, the Arctic sea ice that protects the Kivalina coast from winter storms had diminished, and that the resulting erosion and destruction would require the relocation of Kivalina's residents at a cost of $95 million to $400 million dollars. The plaintiffs claimed that each of the defendants contributed to the excessive CO_2 emissions and other GHGs that cause global warming. Plaintiffs' claims were based on **federal common law:** public nuisance; and **state common law**: private and public nuisance; civil conspiracy; and concert of action. *See Kivalina v. ExxonMobil Corp.*, No. 09-17490 (9th Cir. filed Nov. 5, 2009).

The thread in most common law nuisance cases is that a discrete number of "polluters" are involved and are identified as causing a specific injury to a specific area. The plaintiffs in Kivalina conceded that GHG emissions and the resulting effects of global warming were entirely different from those germane to water or air pollution cases. The plaintiffs' global warming claim was based on GHG emissions from innumerable sources located throughout the world that affected the entire planet and its atmosphere. The plaintiffs admitted that the harm from global warming involved a series of events disconnected from the discharge itself and that in a global warming scenario, GHG emissions combined with other gases in the atmosphere which in turn resulted in the planet retaining heat, which in turn caused the ice caps to melt and the oceans to

rise, which in turn caused the Arctic sea ice to melt, which in turn rendered Kivalina vulnerable to erosion and deterioration resulting from winter storms.

The Court in *Kivalina* noted that the "traceability" of a plaintiff's harm to the defendant's actions need not rise to the level of proximate cause and that Article III does require proof of a substantial likelihood that the defendant's conduct caused plaintiff's injury in fact. However, since there are no federal standards limiting the discharge of GHGs, the Court found that there could be no presumption of a substantial likelihood that any defendant's conduct harmed plaintiffs. Without that presumption, and especially given the extremely attenuated causation scenario alleged in plaintiffs' complaint, is it entirely irrelevant whether any defendant "contributed" to the harm because a discharge, standing alone, is insufficient to establish injury.

Further, the Court noted that the global warming nuisance claim sought to impose liability and damages on a scale unlike any prior environmental pollution case cited by the plaintiffs. The Court also noted that those common law nuisance cases did not provide guidance that would enable the Court to reach a resolution of the Kivalina case in any "reasoned" manner.

For these reasons, the Court determined that plaintiffs' claims did not establish a causal connection between the injury and the defendant's wrongful action and the federal common law claims were dismissed in September 2009. The Court declined to assert supplemental jurisdiction over the remaining state law claims which were dismissed without prejudice to their presentation in a state court action. The plaintiffs appealed to the 9th Circuit Court of Appeals in November 2009 and that case remains pending.

VI. CONCLUSION

Given the lack of agreement on the science and public policy issues associated with climate change, the federal and state court systems will undoubtedly continue to be the main battleground for addressing climate change issues. While this is not an ideal situation, the court decisions to date have provided reasoned analyses that may be helpful in developing a consensus on the issues.

Biography of James D. Braddock

James Braddock has over thirty years experience in environmental law with extensive experience in air quality issues. In his fifteen years as an attorney with the Texas Air Control Board, including his role as General Counsel of that agency, Mr. Braddock was extensively involved with both state and federal air quality regulations and gained substantial experience in administrative law matters including the Open Meetings Act, Open Records Act and rule making requirements.

Mr. Braddock has represented a wide range of clients including airports, refineries, oil and gas operations, asphalt plants, manufacturing operations, and coating operations in both litigation and transactional matters that implicate air quality considerations. He has assisted clients in rule making activities, obtaining permits, and defending against allegations of noncompliance.

EDUCATION

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Climate Change –
"When I See an Elephant Fly"
Regulation of Greenhouse Gases

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Table of Contents

I. INTRODUCTION 1
II. GHGs REPORTING REQUIREMENTS 1
A. Federal Clean Air Act Amendments of 1990 1
B. 2009 Mandatory Reporting Of Greenhouse Gases Rule 2
C. Proposed Amendments to GHGs Mandatory Reporting Rule 2
III. CONTROLLING AND REGULATING GHGS EMISSIONS 3
A. Federal Provisions 3
1. Are GHGs an air pollutant 3
2. "Endangerment" and When Do GHGs Become A "Pollutant Subject To Regulation" . 4
3. Will Owners of Stationary Sources of GHG Emissions Have To Obtain PSD and Title V Permits - - The "Tailoring Rule." 5
B. Texas Provisions 6
IV. POTENTIAL ISSUES IN PERMITTING GHGs 7
A. Best Available Control Technology ("BACT") 7
B. Determining Whether GHGs Emission Impacts are Acceptable 8
V. POSSIBLE CHANGES TO EXISTING REGULATORY SYSTEM 9
A. Legislation To Specifically Preclude GHGs Regulation 9
B. Possible Enactment of Cap and Trade Legislation 9
VI. CONCLUSION 11

I. INTRODUCTION

Speculation has been growing in recent years regarding how greenhouse gases ("GHGs") may be regulated. It may come as a surprise to some that GHGs already are and have been regulated under state and federal laws. GHGs regulation (monitoring and reporting) under the federal Clean Air Act ("CAA"), for example, dates back to 1990 and the Texas Legislature addressed the state's authority to regulate GHGs in 1991 amendments to the Texas Clean Air Act ("TCAA"). Within the last five years, however, we have turned from mere speculation that regulations requiring actual control of GHGs might be promulgated, to the reality of actual control regulations for motor vehicles. Additionally, there is the imminent (January 2, 2011) approach of requirements for stationary sources to address GHGs in permitting just as is done with other pollutants.

The purpose of regulating GHGs is to address concerns that emissions of those pollutants contribute to the "greenhouse effect" causing increases in temperatures at the surface and the lower atmosphere of the earth. Under the greenhouse gas theory (or, if you prefer, the incontrovertible fact), the increased temperatures cause significant changes to our world including drought, flooding, sea level increases, geographical expansion of heretofore tropical diseases, and increases in the frequency and intensity of extreme weather events such as hurricanes. All of these consequences would significantly affect the environment, lifestyles, agriculture, and the economies of the world.

Persons wanting more information on the greenhouse gas theory and its impacts have ample resources to examine that cover all sides of the debate. This paper focuses on the current and imminent regulations under the CAA and the TCAA, including how we got to this point and what the future may look like.

II. GHGs REPORTING REQUIREMENTS

A. Federal Clean Air Act Amendments of 1990

There have been limited GHGs emissions monitoring and reporting requirements in effect since the passage of the federal Clean Air Act Amendments of 1990.[1] Section 821 of that legislation directed EPA to adopt regulations for units subject to the acid rain provisions of the amendments (generally, power plants) to monitor and report emissions of carbon dioxide. Although Section 821 was not an amendment to the actual CAA, the requirements were made enforceable through CAA provisions. In response, EPA adopted regulations requiring power plants to monitor and report carbon dioxide emissions.[2]

In numerous permitting challenges,[3] environmental interest groups have unsuccessfully urged that Section 821 and the EPA regulations established carbon dioxide as a pollutant "subject to

[1] P.L. 101-549, November 15, 1990
[2] 40 CFR Part 75.
[3] *As an example, see* In re Deseret Power Electric Cooperative., Environmental Appeals Board PSD Appeal No. 07-03, November 13, 2008.

regulation under the CAA," which would require applicants for Prevention of Significant Deterioration ("PSD") permits to establish and accept carbon dioxide emission limits as part of the best available control technology ("BACT") review. The issue of whether GHGs emissions, including carbon dioxide, must be considered in PSD (and Title V Federal Operating) permits is addressed in greater detail in Section III.A. of this paper.

B. 2009 Mandatory Reporting Of Greenhouse Gases Rule

EPA adopted in 2009 a significant expansion to GHGs reporting requirements. Congress, in the FY 2008 Consolidated Appropriations Act,[4] directed EPA to spend no less than $3.5 million on a rule requiring reporting of GHGs emissions. EPA based its authority for the final rule, however, on Sections 114 and 208 of the CAA. The stated purpose of this rule is to obtain information needed for EPA's climate change policy decisions and programs.

The final rule[5] requires the collection and reporting of GHGs emission data by certain sources, including fossil fuel suppliers, industrial gas suppliers, direct emitters of GHGs, manufacturers of vehicles and engines outside of the light-duty sector, and certain downstream facilities that emit 25,000 metric tons or more of CO_2 equivalent ($mtCO_2e$).[6] The sources covered by the rule were required to begin monitoring GHG emissions on January 1, 2010 and file the first annual report by March 31, 2011. GHGs were defined as carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorcarbons, perfluorocarbons, and other fluorinated gases.[7]

In its 2009 promulgation, EPA did not take final action on all of the categories of sources that had been included in the proposed rules. On June 28, 2010, EPA Administrator Jackson signed amendments to the reporting rule that include Magnesium Production, Underground Coal Mines, Industrial Wastewater Treatment, and Industrial Landfills as source categories subject to the GHGS reporting requirements. This same action also states EPA's final decision not to include ethanol production and food processing as distinct subparts in the Rule, as well as a final decision not to include suppliers of coal in the Rule at this time.

C. Proposed Amendments to GHGs Mandatory Reporting Rule

EPA has proposed[8] additional changes to the GHGs reporting rule that would require reporting of GHGs emissions from petroleum and natural gas systems, industries that emit fluorinated greenhouse gases, and facilities that inject and store carbon dioxide (CO_2) underground for the purposes of geologic sequestration or enhanced oil and gas recovery.

[4] H.R. 2764; Public Law 110–161.
[5] 74 Fed. Reg. 56,260 (October 30, 2009).
[6] Hereinafter, all references to GHGs emission units are in terms of CO_2 equivalent
[7] 40 C.F.R. §98.6.
[8] 75 Fed.Reg. 18575 (April 12, 2010).

III. CONTROLLING AND REGULATING GHGS EMISSIONS

A. Federal Provisions

For more than a decade, EPA wrestled with the question of whether it has authority to regulate GHGs emissions. As discussed below, that effort included reversal of EPA positions and was finally addressed by a landmark decision of the Supreme Court.

As a prerequisite to adopting regulations under the FFCAA to control or limit GHGS emissions, EPA must determine that GHGs emitted from sources are "air pollutants" and that emissions of GHGs trigger one or more of the FCAA air quality programs such as hazardous air pollutants, criteria pollutants, new source performance standards or emissions from mobile sources. Generally, the determination required to trigger one of these FCAA programs is an EPA finding that the emissions endanger public health or welfare, although each program has its own specific triggering language.

If the requisite finding is made for a CAA program, then the CAA directs EPA to develop appropriate regulations to control or limit the emissions. Permitting requirements may then become applicable because the new source review (preconstruction evaluation of major new sources and major modifications) and Title V (operating permits for major sources) permitting requirements in the CAA are applicable to "pollutants subject to regulation."

1. Are GHGs an air pollutant

EPA has expended significant resources in developing positions on whether GHGs are air pollutants and what type of regulatory actions make an air pollutant one that is "subject to regulation." EPA has made differing determinations regarding the issue of whether GHGs are air pollutants. During the Clinton administration, the EPA General Counsel issued an opinion that GHGs are air pollutants, but that they would not be regulated pollutants until EPA made the required finding under one of the applicable CAA programs and then adopted regulations controlling GHGs pursuant to that finding. During the Bush administration, EPA, relying heavily on a subsequent non-FCAA Supreme Court decision regarding statutory construction,[9] reversed the Clinton administration position and stated that GHGs were not air pollutants under the CAA.

In 2007, the issue of whether GHGs are CAA air pollutants was decided by the Supreme Court in *Massachusetts v. EPA*[10] EPA, in response to a petition that it regulate GHGs from motor vehicles, ruled that GHGs were not air pollutants and that even if they were air pollutants, it would not regulate them for a number of reasons, including lingering uncertainties regarding the science of climate change, the existence of voluntary GHGs reduction programs, and preservation of flexibility for the government to negotiate international agreements regarding GHGs reductions. The Supreme Court ruled against EPA, holding that GHGs were air pollutants and that the other reasons cited by EPA for its decision were not authorized under the CAA. The

[9] FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120 (2000).
[10] 549 U.S. 497 (2007).

Court directed EPA to rule on the petition by addressing the CAA standard for evaluating the petition - - whether GHGs from motor vehicles contribute to air pollution that endangers public health or welfare[11]

2. "Endangerment" and When Do GHGs Become A "Pollutant Subject To Regulation"

In response to the *Massachusetts v. EPA* decision, EPA, in 2008, issued a lengthy advance notice of proposed rulemaking in which it attempted to identify the numerous impacts that would result from an endangerment finding and subsequent regulations, and accepted public comments on those issues[12] Among the impacts EPA identified was the concern that GHGs would become pollutants "subject to regulation," thereby triggering the CAA permitting requirements. The CAA specifies the levels of emissions that constitute major sources triggering permitting requirements, and relatively small emitters of conventional pollutants such as schools, commercial establishments, and apartments, could, for the first time, become subject to CAA permitting requirements if GHGs emissions were counted. EPA and others worried that state agencies, which generally handle the CAA required permitting responsibilities, would be unable to timely process the expected surge in permit applications that would occur if GHGs were counted in determining applicability of permitting requirements.

No further GHGs action under the CAA was taken during the Bush administration. Under President Obama, EPA accelerated its efforts to address GHGs. On December 15, 2009, EPA published its finding that the collective emissions of six GHGs[13] may reasonably be anticipated to endanger public health and welfare ("the endangerment finding")[14] EPA also made the related finding that emissions of GHGs from motor vehicles contribute to air pollution ("the cause or contribute finding").

During this time, public interest and environmental groups, dissatisfied with reliance upon EPA's progress towards regulating GHGs, raised challenges to pending and issued new source review and Title V operating permits, asserting that carbon dioxide was already a regulated pollutant, based, in part, on the existing requirement from the 1990 amendments that power plants monitor and report emissions of carbon dioxide.

An example of this effort is the challenge to the Deseret Electric Power Cooperative application for a construction permit for a coal-fired power plant.[15] In November 2008, the Environmental Appeals Board ("EAB"), considering an appeal of the issued permit, remanded the permit back to EPA. The challengers to the permit had argued that the permit lacked provisions regarding carbon dioxide, including no BACT limits on carbon dioxide emissions.

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[11] Id. at 532-533.
[12] 73 Fed. Reg. 44353 (July 30, 2008).
[13] Carbon dioxide, methane, nitrous oxide, hydrofluoracarbons, perfluorocarbons, and sulfur hexafluoride.
[14] 74 Fed. Reg. 66496 (December 15, 2009).

[15] *In re: Deseret Power Electric Cooperative, PSD Permit No. PSD-OU-0002-04.00*, PSD Appeal No. 07-03, November 13, 2008.

The EAB opinion supported EPA's position that the CAA did not mandate that an air pollutant such as carbon dioxide, subject only to monitoring and reporting regulations, be treated as a pollutant subject to regulation, but remanded the permit because EPA had failed to demonstrate an adequate basis for that position. In response, shortly before the Bush administration left office, then EPA Administrator Stephen Johnson issued a memorandum (the Johnson Memorandum) that reaffirmed the position that carbon dioxide was not a regulated pollutant simply because of the monitoring/reporting requirement, and explained why EPA believes that monitoring and reporting requirements are insufficient to make an air pollutant a regulated pollutant.

Current EPA Administrator Lisa Jackson agreed to reconsider the Johnson Memorandum, but ultimately determined to affirm the position that monitoring/reporting requirements were insufficient to make an air pollutant subject to regulation.[16] As explained in the reconsideration, a pollutant does not become "subject to regulation" until the pollutant is covered in a CAA based (including regulations adopted under the CAA) requirement of actual control that has taken effect. The requirement for actual control would take effect on the date that the control must be in place at the source. Therefore, EPA believes that the adoption of a requirement for control or even the effective date of that adoption, does not, by itself, make the pollutant subject to regulation.

Under EPA's actions and interpretation of the law, GHGs will become pollutants subject to regulation, triggering the permitting requirements, on January 2, 2011. That is the date that model year 2012 motor vehicles must first meet the GHGs standards established in EPA's final rule.[17]

3. Will Owners of Stationary Sources of GHG Emissions Have To Obtain PSD and Title V Permits - - The "Tailoring Rule."

As noted, EPA expressed concerns that the permitting requirements, if applied to GHGs emissions at the levels specified in the CAA, would result in an unmanageable glut of permit applications. In response, EPA has promulgated the GHG "Tailoring Rule" that imposes permitting applicability limits for GHGs that are substantially greater than the limits in the CAA.[18]

The CAA permitting requirements are applicable to major sources which, under the definitions in the CAA, are those with emissions of either 100 tons per year, for specified sources, or 250 tons per year or greater of any pollutant subject to regulation. EPA estimates that application of those emission thresholds to GHGs would result in six million sources requiring Title V operating permits; the processing costs to the permitting agencies to handle that workload would be $21 billion per year. EPA further estimates that there would also be 82,000 PSD permitting actions for GHGs each year, costing the permitting agencies an additional $1.5 billion each year. The

[16] Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs; 75 Fed. Reg. 17004 (April 2, 2010).
[17] Light duty Vehicle Greenhouse Gas Emission Standards; 75 Fed.Reg. 25324 (May 15, 2010).
[18] Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring rule. 75 Fed.Reg. 31514 (June 3, 2010)

tailoring rule will, in EPA's estimation, lower the number of required Title V permits for GHGs to 15,500 sources at a total annual cost of $69 million and lower PSD actions to 1,600 per year at an annual cost to permitting authorities of $36 million.

The reductions in workload under the tailoring rule would result from substantial increases in the amount of GHGs emissions needed to trigger the permitting requirements and delaying the deadlines for applying for those permits into three steps.

The first step lasts six months (beginning January 2, 2011), with only those sources already required to obtain PSD or Title V permits to address other emissions being required to address GHG emissions. Applicability of PSD in the first step would be limited to sources increasing GHG emissions in an amount of 75,000 tons per year or more. Title V sources would have to address applicable GHG requirements; currently, the only such requirement would be the GHG reporting rules.

The second step begins at the end of the first step (July 1, 2011) and lasts for two years. In the second step, construction of new sources with at least 100,000 tons per year of GHG emissions would be subject to PSD even if emissions of other pollutants would not trigger PSD. Modifications at an existing major source that would increase GHG emissions by 75,000 tons per year or more would also trigger PSD. Title V requirements in the second step would be extended to those sources with 100,000 tons per year or more of GHG emissions that would not trigger Title V for any other pollutants.

The details of the third step will be developed through additional rulemaking, which will begin in 2011 and be completed by July 1, 2012 The third step will consider whether to permanently exclude smaller GHG sources and streamline GHGs permitting processes. EPA stated that in the third step, permitting thresholds will not be lower than 50,000 tons per year of GHGs and sources smaller than the thresholds in Steps 1 and 2 would, if required in Step 3 to obtain permits, not be subject to that requirement before April 30, 2016.

Another significant timing issue addressed by EPA in the tailoring rule is the decision regarding the grandfathering of pending applications. EPA announced that pending applications would not be grandfathered from GHGs permitting requirements. Accordingly, permits issued on or after January 2, 2011 will have to address GHGs if required under the tailoring rule.

B. Texas Provisions

The Texas Commission on Environmental Quality ("TCEQ") is the agency responsible for air quality regulation in Texas. The TCEQ also has taken the position that it does not, and is not required to regulate GHGs, including no review of GHGs in air quality permit applications. The issue of TCEQ authority over carbon dioxide emissions has been raised in several contested case hearings on applications for coal-fired power plants. The TCEQ has taken the position in those hearings that it does not consider carbon dioxide in permitting decisions.

Section 382.0205(3) of the Texas Clean Air Act ("TCAA") provides:

> Consistent with applicable federal law, the commission by rule may control air contaminants as necessary to protect against adverse effects related to: . .
>
> (3) climatic changes, including global warming.

The TCEQ has not adopted any rule controlling or limiting GHGs for the purpose of addressing climatic changes. In response, a public interest group, Public Citizen, Inc., has filed a lawsuit against the TCEQ, alleging that the agency has unlawfully refused to regulate CO_2 and, by its decisions, has established unlawful interpretive rules that prevent the TCEQ and anyone else from seeking limits on carbon dioxide emissions.[19] The lawsuit requests a declaratory judgment that the TCEQ's interpretive rules are unlawful and that power plants cannot be permitted without making findings for CO_2 emissions of the same type as made for other air contaminants.

IV. POTENTIAL ISSUES IN PERMITTING GHGs

A. Best Available Control Technology ("BACT")

In order to obtain a PSD permit, the applicant must demonstrate that it will use the BACT to limit the emissions of the pollutants triggering the PSD requirements. BACT is defined in the PSD rules as:

> an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each a regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the reviewing authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combination techniques for control of such pollutant....[20]

Although EPA has yet to consider GHGs emissions in PSD permits, it has taken other steps that some believe are tantamount to forcing permitting authorities to consider technology/fuels that would effectively minimize GHGs emissions. These steps have been taken in response to petitions objecting to the issuance of Title V Operating Permits for power plants.

EPA recently granted two such petitions on the issue of the adequacy of the review of whether the plants would employ the BACT. One was based upon the alleged inadequate analysis of whether integrated gasification, combined cycle technology ("IGCC") should be used to generate electricity instead of the proposed combustion of pulverized coal.[21] The IGCC process uses coal to generate a gas which is then burned and used to generate electricity. IGCC can result in fewer emissions and facilitates the ability to capture carbon dioxide generated in the process.

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[19] *Public Citizen v. Texas Commission on Environmental Quality*, Docket No. D-1-GN-09-002426, District Court, Travis County.

[20] 40 C.F.R. §52.21(b)(12).

[21] *In the Matter of American Electric Power Service Corporation, Southwest Electric Power Company*, Petition No. VI-2008-01, December 15, 2009.

The other granted petition was based upon the alleged inadequate analysis of whether natural gas, proposed to be used as a secondary fuel source, should instead replace coal (processed by IGCC technology) as the primary fuel source.[22] Natural gas results in lower amounts of air pollutants, including GHGs, compared to using coal.

In these permit objections, EPA did not direct that the alternative technologies must be employed, only that the permitting authorities did not provide an adequate justification for their decisions. It should be noted that EPA has maintained that its policy is that it will not impose as BACT, any requirements that would force a company to "redesign" the proposed source. Although EPA's decision in both cases did not rest upon the issue of controlling GHGS, many believe that the effect of the decisions is that it will be much more difficult to build new coal-fired plants, which will have the effect of limiting GHGs.

Anticipating the initiation of PSD permitting for GHGs, EPA formed a workgroup in October 2009, composed of a broad range of interests, to develop consensus positions on how to make BACT determinations for GHGs. Not surprisingly, it has been reported that consensus on the issues has been elusive. There does appear to be a general belief that energy efficiency measures will have to be considered in a BACT review and that is consistent with EPA's announced position on BACT for other pollutants. Options discussed for which there is no consensus include, among others, using offsets in lieu of controls at the source, requiring changes at equipment that is not undergoing the modification, forcing relocation of the source to a point where it would be feasible to utilize existing carbon dioxide pipelines, and many others.

B. Determining Whether GHGs Emission Impacts are Acceptable

Under PSD, increases in emissions subject to PSD are compared to the allowable "increment" of increases in the pollutant established in the rules. The increment prevents "significant deterioration," and therefore a PSD permit may not be issued that would result in an exceedance of the increment. There is, however, no increment established for GHGs so no analysis on that issue is required. Additionally, there is no National Ambient Air Quality Standard ("NAAQS") for GHGs so the normal PSD review to ensure protection of a NAAQS is not required for GHGs.

In Texas, however, in order to obtain an air quality permit, the applicant must demonstrate that its proposed emissions will not cause or contribute to a condition of air pollution. A condition of air pollution occurs when air contaminants[23] are of such concentration and duration that they adversely affect human health, animal life, vegetation or property or interfere with the normal use and enjoyment of property.[24] Presumptively, opponents of permit applications involving GHGs emissions would argue that there already is a condition of air pollution for GHGs everywhere in the state (and, everywhere in the world) and therefore any increase in GHGs emissions would be deemed to "contribute" to a condition of air pollution. A similar argument has been made in recent years by opponents of power plant permits in regard to the projected impact of emissions of ozone precursors on downwind areas of the state that are not attaining the

[22] *In The Matter of Cash Creek Generation*, LLC, Petitions Nos. IV-2008-1 & IV-2008-2, December 15, 20.
[23] The TFCAA uses the term "air contaminants" in contrast to the FFCAA term "air pollutants."
[24] Section 382.003(3), Texas Health and Safety Code.

ozone NAAQs. TCEQ has ruled that de minimis levels of increases in concentrations of other air contaminants can be construed to not be a "contribution." This position will likely be adopted for GHGs impacts on climatic changes.

V. POSSIBLE CHANGES TO EXISTING REGULATORY SYSTEM

A. Legislation To Specifically Preclude GHGs Regulation

Many members of Congress have reacted negatively to EPA's movement towards regulation of GHGs under the existing provisions of the CAA. Specific attempts to prevent or reverse EPA's actions have been filed. Senator Murkowski authored an attempt to overturn EPA's findings that GHGs endanger public health and welfare but failed to garner enough support to obtain a vote on her measure. If adopted, Senator Murkowski's measure would not only preclude EPA from moving forward with the permitting of stationary sources of GHGs but would also overturn EPA's GHGs regulations applicable to motor vehicles. A more limited effort is the bill by Senator Rockefeller that would impose a two year delay on any GHGs regulation of stationary sources. Senator Rockefeller's measure would allow the GHGs regulation of motor vehicles to continue, but would delay permitting of GHGs and other GHGs regulation of stationary sources. Senator Voinovich announced his intent to obtain legislation that would preempt EPA and other federal and state agencies regulation of GHGs as well as preclude common law and civil tort actions related to damages alleged to be caused by emissions of GHGs.

B. Possible Enactment of Cap and Trade Legislation

Due to the concerns regarding the legal ability of EPA to regulate GHGs under the existing CAA and the potential economic impacts, there has been a substantial amount of interest in attempts to adopt statutory provisions that would provide for reductions in emissions of GHGs in addition to providing clarity regarding what, if any, existing CAA provisions should apply to GHGs. In early 2009, there was optimism on the part of supporters of GHG legislation that the Democrat's control of the White House and Congress would result in the expeditious passage of comprehensive GHGs legislation. That has not happened as other legislative priorities, concerns about the economic consequences of the various legislative proposals, and the lack of consensus on the extent to which CAA regulation should continue, have prevented passage of legislation. As discussed below, the various legislative proposals have become less ambitious over time and there remain controversies regarding the extent to which existing CAA programs should apply to GHGs and whether state and local governments should be preempted from regulating GHGs.

Most of the legislative proposals have focused on a "cap and trade" program similar to the existing acid rain cap and trade program for sulfur dioxide emissions from power plants. There are also numerous other cap and trade programs implemented by states including nitrogen oxides and highly reactive volatile organic compounds in portions of Texas and a GHGs cap and trade program, the Regional Greenhouse Gas Initiative ("RGGI"), in states in the northeast. In a typical cap and trade program, the cap is a limit on total emissions from the sources subject to the cap that will decline over time. Sources subject to the cap would have to demonstrate each year that they held sufficient "allowances" (an allowance is one ton per year of GHGs) to cover their total GHGs emissions from the previous year. Most cap and trade proposals include

provisions for offsets where a company could satisfy a portion of its allowance requirements through projects that would reduce carbon dioxide emissions by means other than controls at the sources such as planting of trees and reducing energy demand. The trade portion of a cap and trade program allows companies subject to the requirements the ability to sell or buy allowances.

Due to the decline in public and congressional support, the scope and stringency of legislative cap and trade proposals filed or floated in Congress have also declined over time. The first major bill in 2009, the American Clean Energy and Security Act of 2009, eventually was passed by the House of Representatives. It is a broad bill that includes power plants, manufacturing and transportation in a GHGs cap and trade program and is designed to achieve GHG reductions from 2005 levels of 17% by 2020 and 80% by 2050. The latest efforts which have yet to be voted on include what was to be a bipartisan bill from Senators Kerry, Lieberman and Graham, which became substantially less bipartisan when Senator Graham abandoned the effort. This bill, the American Power Act, would scale back the cap and trade program to power plants and large industrial sources, but maintained the goals of 17% and 80% reductions in GHGs by 2020 and 2050, respectively.

The latest reports indicate that Senators Kerry and Lieberman are now considering limiting the cap and trade program to power plants in an effort to garner enough support to get the bill past a filibuster and on to an actual up or down vote. Senator Bingaman is also working on a power plant only cap and trade bill. Additionally, the cap and trade bills and other bills pending in Congress have provisions for indirectly reducing GHG emissions by reducing energy demand and/or providing incentives for development of lower GHGs emitting sources of energy. It is also being reported that instead of a separate GHGs bill, a GHGs cap and trade section applicable to power plants may be added to an energy bill which would then be moved towards a vote.

In addition to the obvious concerns regarding what sources should be subject to the GHGs cap and trade program and the degree and timing of the GHGs reductions, a number of other concerns have impeded passage of legislation. Those concerns include:

1. Should allowances be granted to sources based upon historical operating levels, auctioned, or sold at fixed prices? What should be done with the revenues generated from the auctioning or sale of allowances - - should they be applied to deficit reduction, rebates to consumers, GHGs reduction measures, research, building sports stadiums?

2. Should offsets be allowed, and if allowed, under what conditions? How will offsets be evaluated to determine their actual impact on GHGs concentrations? How can it be determined that the offsetting measures will result in actual GHGs reductions that would not otherwise occur? How can it be determined whether offsets are maintained in the future, *e.g.,* will sequestered gases remain sequestered, will planted trees continue in existence?

3. What, if any FCAA programs should be applicable to GHGs emissions? Should GHGs permits still be required, and if so, what sources should have to

obtain permits - - those subject to cap and trade, those not subject to cap and trade, or both? Should technology based standards be established for GHGs emissions under existing FCAA programs such as New Source Performance Standards (NSPS) and hazardous air pollutants (NESHAPs)?

4. What GHGs authority should be lodged with state and local governments? Should they have authority to administer and enforce the provisions of the federal program? Should existing GHGs programs like the Regional Greenhouse Gas Initiative be allowed to continue? Should new state and local GHGs reduction programs be allowed? Should state and local programs be allowed to be more stringent than the federal program?

5. How, if at all, would a United States GHGs program interface with international GHGs programs. Would requirements to reduce GHGs be conditioned on other countries also reducing GHGs. Would certain categories of sources be exempted from GHGs requirements if competing industries in other countries are not subject to similar requirements.

VI. CONCLUSION

For at least two decades, there has been more hype and anticipation regarding regulation of GHGs than actual progress. The assumption that the Kyoto Treaty, the international agreement for the reduction of GHGs, would ultimately result in nation-wide mandatory GHGs reductions has not come to pass. Congress, even after the election of a Democratic Party President who supports climate change legislation, has been unable either to approve Kyoto or implement its own GHGs reduction legislation. Further significant international agreements are unlikely without the agreement of the United States, China, and other countries whose willingness to agree to mandatory reductions is highly unlikely. EPA movement towards regulation has been slow, with only the recent adoption of the GHGs motor vehicle rule as a tangible reduction requirement. The only readily foreseeable impact of EPA's efforts on stationary sources is implementation of permitting requirements, but that change will likely have only a minor impact on GHGs emissions in the near term. The permitting BACT requirement only impacts new or modified sources and it is likely (but by no means assured) that BACT for GHGs will be of limited consequence for some time until GHGs controls are developed and proven to be effective both in costs and impacts.

There are uncertainties regarding the future. Efforts to push the BACT issue as including the ability to force permit applicants to use different fuels, different production technologies, purchase offsets and even consider different locations for the planned source would, if successful, have more substantial impacts. The same principles used to justify the endangerment and cause or contribute findings for GHGs from motor vehicles may be used to trigger implementation of other CAA programs, perhaps even to force development of a NAAQS for GHGs. Additionally, although the economic downturn and dwindling public opinion support for action has slowed the march towards state and local GHG regulation, including cap and trade, the RGGI program continues and other regional efforts to develop similar programs also continue. Finally, the fear of common-law and civil tort litigation must also be accounted for in

determining the impacts of not regulating GHGs. As a result, there will be continued pressure on Congress to adopt comprehensive GHGs legislation. From the perspective of the environmental interests, legislation could assure that significant reductions in GHGs would occur. From the business perspective, legislation could provide relative certainty and predictability, allowing business to develop plans for the future based upon a comfort level regarding anticipated costs. In the meantime, however, EPA will move forward and litigation will continue.

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Climate Change – *"When I See an Elephant Fly"*

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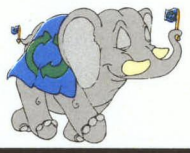
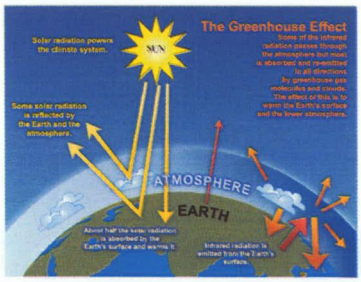
haynesboone
Setting precedent

- Dumbo is concerned that its circus may be subject to greenhouse gas ("GHG") regulation under the federal Clean Air Act
- Dumbo hires a consultant to explain



What is the greenhouse effect?



From global-greenhouse-warming.com

What are some Greenhouse Gases ("GHGs")?

- Examples of GHGs

  CO_2 (carbon dioxide)
  CH_4 (methane)
  N_2O (nitrous oxide)
  HFCs (hydrofluorocarbons)*
  PFCs (perfluorcarbons)*
  SF_6 (sulfur hexafluoride)*

- GHGs are generally referred to as "carbon" and are expressed in terms of CO2 equivalents, based on their relative global warming potentials over a period of time multiplied by the GHG's weight.

*Do not occur in nature

hayne:

"What Should We Do?"

- Dumbo asks "What should we do?"
- Consultant responds: "You should probably develop a GHG Emissions Inventory ("E.I."). " BTW "How much consulting can you afford?"

hayne:

GHG Emissions Inventory

- Dumbo hires engineer to do GHG E.I.
- The engineer identifies (among other things):
  - CO_2 emissions from heaters and power generators
  - Methane emissions from the animals and the waste products from the animals
  - Co_2 emissions from the animals
  - Co_2 emissions from the trucks that transport the circus and from the Casey Jr. train

hayne:

GHG Emissions Inventory

- Dumbo asks: "Is that all of it?"
- Engineer replies: "Maybe, how much engineering can you afford?"

hayne:

Regulatory Issues

- Dumbo then is advised of regulatory issues

hayne:

GHG Regulation under F.C.A.A. dates back to 1990

- Power plants were required to monitor and report CO_2 emissions
- "EPA has adopted and proposed additional and broader GHG reporting requirements – could they apply to the Circus?"

hayne:

GHG Emission Reporting Rule

- Final rule for mandatory reporting of GHG emissions from certain large emitters and suppliers of GHGs -- 74 Fed. Reg. 56260 (Oct. 30, 2009)
  - Suppliers of fossil fuels
  - Manufacturers of vehicles and engines
  - Certain specified categories of facilities (some of which must report only if they emit more than 25,000 tons/year of GHGs)
  - Stationary combustion sources that emit more than 25,000 tons/year of GHGs)
- Proposal to expand to oil and gas and other operations – 74 Fed. Reg. 16448 (April 10, 2010)

THINGS START TO HEAT UP

- P.E.T.A. threatens citizen suit claiming the Circus' GHG emissions require it to obtain a PSD Air Quality Permit

THINGS START TO HEAT UP

- Dumbo hires attorney and learns . . .
- *Massachusetts v. EPA*, 549 U.S. 497 (2002) is very important

Massachusetts v. EPA

- Petitioners sought to require EPA to promulgate GHG emission rules for motor vehicles and appealed an order denying their petition.
- Section 202(a)(1) of the CAA requires the EPA Administrator to prescribe emission standards for "any air pollutant" from any new motor vehicle that, in his judgment, "cause or contribute to" air pollution that "may reasonably be anticipated to endanger public health or welfare."

hayne:

Massachusetts v. EPA (cont'd)

The Supreme Court held that:

- GHG fit the CAA definition of air pollutant.
- the CAA authorizes EPA to regulate GHGs from new motor vehicles if it forms a judgment that such emissions contribute to climate change.
- EPA can avoid taking regulatory action with respect to GHGs only if it determines they do not contribute to climate change or if it explains why it cannot or will not exercise its discretion to determine whether they do.

hayne:

Regarding the requirements for CAA permits, the attorney advises Dumbo that:

- Stationary sources of air pollutants "subject to regulation" under the CAA may have to obtain pre-construction permits for new or modified sources and Title V operating permits
- *Massachusetts v. EPA* held that GHG are air pollutants
- But, are they air pollutants "subject to regulation?"

hayne:

Do monitoring and reporting regulations make an air pollutant "subject to regulation?"

- *In re Deseret Power Electric Cooperative* PSD Appeal No. 07-03
- EPA Position is that Monitoring and Reporting Regulations Do Not Mandate that EPA to treat an air pollutant as "subject to regulation
- Environmental Appeals Board Agrees With EPA Position But Remands the Permit Directing EPA to Provide New Support For Its Position

hayne:

Monitoring and Reporting Regulations Do Not Mandate that EPA to treat an air pollutant as "subject to regulation"

- The *Deseret Power* remand leads to the Johnson Memorandum and its reconsideration
- EPA maintains that an air pollutant is not "subject to regulation" until CAA based requirement of actual control has taken effect (the control is required to be in place at the source)

hayne:

ARE GHG POLLUTANTS SUBJECT TO REGULATION

- So, according to EPA, monitoring and reporting do not make a pollutant subject to regulation, but . . .

hayne:

ARE GHG POLLUTANTS SUBJECT TO REGULATION

- EPA is moving on pursuant to *Massachusetts v. EPA*

hayne:

EPA's Endangerment Finding -- 74 Fed. Reg. 66496 (Dec. 15, 2009)

- On December 7, 2009, EPA Administrator Lisa Jackson announced EPA's findings that
  - emissions of greenhouse gases may reasonably be anticipated to endanger public health and welfare ("the endangerment finding"); and
  - emissions of greenhouse gases from motor vehicles contribute to air pollution ("the cause or contribute finding").

hayne:

EPA adopts GHG control requirements for motor vehicles

- 75 Fed. Reg. 3514 (May 15, 2010)
- The actual control requirement "takes effect" on January 2, 2011

hayne:

PERMITS

- Dumbo asks . . . "so on January 2, 2011 the Circus becomes subject to CAA permitting requirements for GHG and we would need a permit for each new location when we travel?"

hayne:

PERMITS

- The lawyer responds . . . "maybe"

hayne:

PERMITS

- Based upon the provisions of the FCAA which set permitting trigger levels as low as 100 tons per year, you would need operating permits and preconstruction permits each time you locate at a new site.

hayne:

Maybe . . . Maybe not

- Dumbo responds: "So we are _____ (fill in the blank)"
- The lawyer answers: "maybe . . . maybe not"

hayne:

The EPA "Tailoring Rule" 75 Fed. Reg. 31514 (June 3, 2010)

- Limits permit applicability in series of steps
- EPA announces that a minimum of 50,000 tpy of GHG will be required to trigger permitting and a possibility of permanent exemption for sources with 50,000 tpy, or more.
- Sets even larger amounts needed to trigger permitting before 2016

hayne:

Dumbo says "That sounds O.K."

- Lawyer responds: "not so fast . . . everybody is suing over all of this and the tailoring rule is believed by many to be on shaky legal grounds"
- Also you have to worry about regulation by each state where you take the Circus

hayne:

State Regulation

- Regional Greenhouse Gas Initiative (RGGI)
- California Global Warming Solutions Act
- Other Jurisdictions Working on Proposals
- Dumbo says the Circus is a big deal in Texas . . . What is going on in Texas

hayne:

What About Texas

- §382.0205, Texas Health & Safety Code (enacted in 1991)
  - "Consistent with Applicable Federal Law"
  - "The Commission by rule may control air contaminants"
  - "to protect against adverse effects related to . . . climatic changes, including global warming

hayne:

WHAT CAN WE DO?

- Dumbo asks "What else can we do?"
- Lawyer answers: "change the law . . . BTW, how much justice can you afford?"

hayne:

Dumbo hires Lobbyists

Lobbyists explain there are a lot of things going on

hayne:

Possible Legislative Preemption of EPA and Related Regulation

- Passage of GHG legislation with preemption language
- Overturn the Endangerment and Cause or Contribute findings – Murkowski
- Two year ban on GHG Regulation of Stationary Sources – Rockefeller
- Preemption of EPA, other federal and state agencies GHG Regulation and Common Law and Civil Tort Actions - Voinovich

hayne:

Will Something Pass?

- Dumbo asks "Will Something Pass?"

hayne:

WILL SOMETHING PASS

- Lobbyist responds, "Well, the Murkowski measure can't make it to a vote. Oh, BTW, if something passes, you may have to participate in a Cap and Trade Program or some variant of that."

hayne:

Cap and Trade

- The regulatory authority sets a cap on total mass emissions for a group of sources for a fixed compliance period
- The authority then divides the cap into allowances, representing an authorization to emit a specific quantity of pollutants, *e.g.*, 1 ton/year GHGs, which are then allocated or auctioned off
- The cap is ratched down over time

hayne:

Cap and Trade (cont'd)

- For a specified compliance period, the affected sources must measure and report emissions
- At the end of the compliance period, sources must surrender their allowances to cover their emissions
- If they do not have enough, they are penalized

hayne:

CAP AND TRADE PROPOSALS

- Dumbo asks: "What is the Cap and Trade Proposal?"
- Lobbyist responds: "There are several variants, and other proposed legislation as well."

hayne:

Proposed Federal Legislation

- American Clean Energy and Security Act of 2009 ("ACES") – House (Waxman Markey)
- Clean Energy Jobs and American Power Act ("CEJAPA") – Senate (Kerry Baker)
- Carbon Limits and Energy for America's Renewal Act ("CLEAR") - Senate(Cantwell Collins)
- Clean Energy Partnerships Act – Senate (Stabenow)
- Clean Energy Act of 2009 – Senate (Alexander Webb)
- American Power Act (Kerry, Lieberman)

hayne:

Cap and Trade Issues

- How much GHG reductions and how soon?
- How should allowances be distributed . . . give, sell or auction?
- How should revenues from sales of allowances be distributed?
- What sources would be covered by Cap and Trade?
- Should offsets be allowed and under what conditions?
- Relief for business adversely impacted

hayne:

CAP AND TRADE OR PERMITS?

- Dumbo asks: "so it is either Cap and Trade or permits?"
- Lobbyist replies: "Well, it could be both . . . BTW, how much lobbying can you afford?"

hayne:

A GLIMMER OF HOPE

- The consultant, engineer, lawyer and lobbyist discuss the problem and advise Dumbo they have a partial solution

hayne:

A GLIMMER OF HOPE

- It's called a "Flexible Permit"

hayne:

A GLIMMER OF HOPE

- "But Dumbo, you will need to hire an accountant to determine your ongoing compliance under the flexible permit."
- How much accounting can you afford?

hayne:

A GLIMMER OF HOPE

- And, BTW, there may be some legal issues with that flexible permit - - How much justice did you say you could afford?

hayne:

Update

- Senator Reid announces GHG will not be part of the Energy Bill
- Cap and Trade Advocates pushing to develop a cap and trade proposal focusing on power plants
- Speculation that cap and trade might be added to Energy Bill in House-Senate Conference Committee

hayne:

Update (cont'd.)

- Senator Rockefeller promised a vote on two year suspension of FCAA GHG Stationary Source Regulations
- Senator Murkowski seeking bill to which she could add provisions overturning EPA's Endangerment Finding
- EPA rejects petitions challenging Endangerment Finding

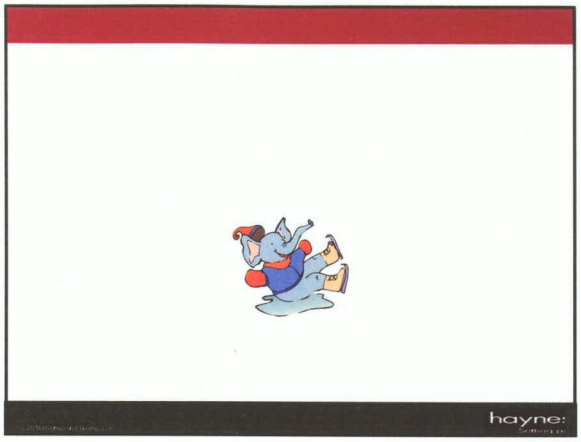
hayne:

CONCLUSIONS

- Dumbo now realizes that his circus is not the only circus in town
- Sources of emissions need to be aware of GHG regulatory developments
- Absent legislation or adverse court decisions, EPA will begin permitting of GHG. It is reasonable to expect substantial controversies over permitting requirements, particularly BACT
- EPA will also have to consider other CAA based regulation of GHG including under NSPS, NESHAPS and NAAQS

hayne:

hayne:


hayne:

Kevin Ewing, Partner

Kevin Ewing counsels investors, Fortune 500 companies and international corporations on climate change and other environmental risks in strategy development, commercial negotiations, and major projects and corporate transactions. He advises clients on environmental disclosures and reporting, especially in the securities context, and helps manufacturing, energy and services companies address and manage systemic climate change and environmental issues through improved compliance structures, corporate governance and auditing/performance measurement.

Climate Change Disclosure Update

By Kevin A. Ewing
Bracewell & Giuliani LLP

Introduction

For years, the topic of climate change disclosure has risen and fallen in the public consciousness at irregular intervals. Each time the topic rises, bystanders look up with expectation, but then like a kite the topic stalls and drops from view for a while. Sustained flight and forward movement have proved elusive. On January 27, 2010, the kite soared again on a major uplift from the SEC, which issued a guidance document that focuses specifically on whether and how climate change risks, costs, and opportunities should be disclosed by publicly traded companies. The challenge now is to gauge the strength and direction of this new gust of wind and to discern whether it will move climate disclosure practice to a different place. Below we analyze the origins and content of the guidance and then offer observations about what it does and doesn't mean and where it might take us over the next several years of disclosure practice.

Overview

The settled practice in writing about environmental disclosure dictates that one begin with a survey of Items 101, 103 and 303 of SEC Regulation S-K. Our overview will be abbreviated, since many primers are available to bone up on the basics (see reference material following this article). The essentials are quickly recounted.

The Securities Acts of 1933 and 1934 were passed in the wake of the Crash of 1929 in order to create a legal foundation for requiring honest and fair disclosure about the risks and financial strength of companies in which the untutored public was investing. Henceforth, the theory went, the investing public would never again be swindled into buying a pig in a poke. Or, if it was swindled, it would have legal recourse.

Over the years, this legal foundation was steadily built upon, mainly through regulations that constructed analytical frameworks for analyzing risk and opportunity for disclosure purposes. Among these, Regulation S-K looms large. It requires regular reporting (annual and quarterly reports), and it mandates specific content, including disclosure of environmental compliance and investment affecting the business (Item 101), environmental legal proceedings (Item 103), and known environmental trends and uncertainties that could reasonably prove material (Item 303). Parallel efforts on the accounting side developed the approach to a quantitative display of information relating to environmental risk and uncertainty. In recent years, the passage of Sarbanes-Oxley has directed attention to the challenge of corporate governance – how a company uses corporate infrastructure to marshal risk and discipline decision-making in the midst of uncertainty.

Each of these areas of development – Regulation S-K, the accounting rules, and the governance model of Sarbanes-Oxley – is relevant to the topic of climate change. Let's take Item 101 first. Item 101 requires consideration of the compliance costs associated with existing and new environmental legal requirements dealing with climate change. The public company must recognize the material effects of compliance on expenditures, earnings and competitive position,

and it must disclose the material capital expenditures for the current reporting year and for further years as the company deems material. In the case of climate change, no federal climate-change legislation has passed into law, although some new regulations (such as the GHG inventory rule) have been promulgated. The prevailing view is that the most expensive and complex climate change laws lie in the future and are not yet a matter for material current expenditures. Moreover, the ups and downs of legislative fortunes have created uncertainty not only about timing but also about the scope and structure of future requirements, impeding the assessment of future compliance costs.

Despite the absence of comprehensive climate change legislation, legal proceedings based on climate change have been coursing through the courts. Perhaps the most innovative are tort-law claims seeking monetary damages for the alleged effects of specific companies' emissions on the climate and the alleged consequent effect of the changing climate on the plaintiffs' protected interests. Other claims are being lodged under the National Environmental Policy Act ("NEPA"), the Endangered Species Act, and the Clean Air Act to challenge permits that allegedly do not adequately account for the permitted activity's effects on climate and consequent effect on protected habitat or air quality. For all these companies, Item 103 comes into consideration. If legal proceedings are material, or if they are asserted by the government and involve monetary sanctions of $100,000 or more, disclosure is required.

Item 303 is likewise relevant to climate change. The management of the company must provide a narrative discussion of historical results and future prospects. The idea is that the investing public should have not only the facts and figures about the company in a snapshot but also the perspective of management on the trends and uncertainties that, in management's judgment, materially affect future liquidity, capital resources and results of operations. There are two keys to Item 303: knowing what materiality means, and knowing when a trend or uncertainty is disclosable. A fact is material when – in the eyes of management – it is substantially likely that a reasonable investor would consider the total mix of available information to have been significantly altered by omitting the fact. The SEC has repeatedly confirmed that materiality is not merely a quantitative measure, and even as a quantitative measure there is no minimum threshold of significance.

The other key to Item 303 is knowing when a trend or uncertainty is disclosable. The established analytical framework is to ask, first, whether the trend or uncertainty is likely to come to pass; if it is not likely, the inquiry ceases, though the company may do well to track the trend or uncertainty in case its likelihood increases. If the trend or uncertainty is likely to come to pass, *or if the likelihood is unknown*, the company must disclose and discuss it, *unless* management concludes that a material effect is not reasonably likely even if the trend or uncertainty came to pass. In short, the test under Item 303 favors disclosure in the face of uncertainty and relies heavily on the judgment of management (subject always to the oversight of the SEC and the courts). Management's discussion and analysis under Item 303 has been the principal venue for consideration of climate change and its potential material effects on the business.

A final word on Sarbanes-Oxley is worthwhile in the context of climate change, though it is often omitted in discussions of climate disclosure. Sarbanes-Oxley imposes an obligation on companies and management to create "controls and procedures" to ensure integrity in disclosures

and financial audits. CEOs and CFOs must periodically certify that such controls and procedures are in place. Serious personal and corporate consequences follow from non-compliance. In essence, whereas Regulation S-K focuses on complete, relevant and accurate descriptions of the company and its risks and opportunities, Sarbanes-Oxley focuses on the internal architecture of corporate governance to ensure the sustained integrity of the company's self-knowledge and disclosure. Given the multivariable complexities of climate change and its nexus with individual businesses, governance is a topic well worth exploring more closely. As we will see, the SEC recently drew attention to this point.

The Status Quo Ante

So where did the disclosure world stand on climate change before the SEC's decision in January 2010? Various studies have documented the evolving disclosures of companies across many sectors of the economy, both in the United States and abroad. *See, e.g.*, Carbon Disclosure Project 2009, *S&P 500 Report* (written for Carbon Disclosure Project by PricewaterhouseCoopers); CERES, *Climate Risk Disclosure in SEC Filings: An Analysis of 10K Reporting by Oil and Gas, Insurance, Coal, Transportation, and Electric Power Companies* (June 2009). Suffice it to say that narrative discussions about climate have increased year by year in length and detail, but by and large few companies have ventured quantitative assessments of the predicted impacts of climate change (and associated legal strictures). Variation in disclosure seems most evident between sectors, which is explained by the different levels of GHG emissions from different sectors and by the reality that the legislative focus has rested more heavily upon certain sectors (*e.g.*, power production) than others.

Various groups have clamored for years for more specific, quantitative, and definitive disclosures about the effects of climate change on reporting companies. These groups include investor groups like CalPers, political bodies or representatives such as state CFOs, environmental groups, and investor protection groups, to name a few. In addition, NGOs (often in collaboration with these groups) have worked to create and refine specific guidelines and protocols for climate change disclosure. Leading examples include the work of the Global Reporting Initiative, the World Business Council for Sustainable Development, and the Carbon Disclosure Project. These efforts, however, are directed toward voluntary disclosures rather than the particular disclosure requirements under national laws (such as Regulation S-K in the United States).

In the world of mandatory disclosure under United States law, a parallel effort developed to engage the SEC on the topic of climate change. The leading edge of this effort was a petition filed in 2007 seeking action by the SEC.

The Climate Disclosure Petition to the SEC

In September 2007, CERES and a broad array of co-petitioners filed a joint petition urging the SEC to address the topic of climate change disclosure. Much as been said about this petition (and a supplement filed later). In essence, it reviews climate change as a physical phenomenon and discusses its potential to affect the financial health of companies through increased physical risks (*e.g.*, sea-level rise, increased incidence and severity of storms, and water scarcity) and rising compliance expenditures, among other factors. The petition also recorded the urgent clamor among investors and investor groups for more and better information about how these

risks affect specific companies. On this basis, the petitioners sought to justify the intercession of the SEC via an interpretive guidance that would reinforce the necessity of companies to consider climate change risks and to disclose them adequately.

The petition purportedly did not seek any change in disclosure law but rather guidance on how to ensure better disclosure. However, lurking below the surface seemed to be the suggestion that the SEC should *compel* more (as well as more specific) climate change disclosure, as though climate change risks were per se material or carried a rebuttable presumption to that effect.

The SEC took the petition under advisement. Despite occasional efforts to nudge it forward, the petition threatened to slide into irrelevance as the months and years passed without action or interest by the Commission. As so often in the world of environmental disclosure, talk of action eclipsed actual action by a handsome margin.

The petition's fortunes turned a corner with the election of Barack Obama as President and the appointment of Mary Schapiro as Chairman of the SEC. Within months, the Commission's staff let it be known that the Commission was interested in the petition and the topic of climate change. Public and investor interest was rekindled in the petition, though for a time it seemed that the pressing – indeed exceptionally urgent – need for financial reform and improved SEC oversight of the financial markets in the wake of the real-estate crash would dominate the Commission's agenda. Indeed, when the announcement came that the SEC had put climate change guidance on the official agenda of January 27, 2010, some members in Congress expressed dismay with the Commission's diversion from the task of restoring confidence in the financial markets. But a concomitant upwelling of support also arose in the disclosure advocacy community to greet the SEC's long-awaited action.

The SEC's Guidance on Climate Change

When climate change disclosure finally made it onto the Commission's official agenda in January 2010, it was paired with discussion and action on new Commission rules about liquidity and disclosure requirements for money market funds, perhaps to respond to concerns that the SEC was not sufficiently attentive to customer-focused concerns about stock market integrity. Be that as it may, the tantalizing topic of the day was climate change.

The short of it is that the SEC adopted a new interpretive release over the objections of two commissioners and with inconsistent explanations of the guidance by the three supporting commissioners. Disclosure advocates cheered, but reporting companies furrowed their brows, especially when it became clear that the new guidance would apply to annual reports that were even then being prepared for calendar year 2009.

Stripped to its barest essentials, the guidance identified four areas for particular evaluation when assessing corporate risks from climate change in the context of SEC-mandated disclosure, namely:

- the impact of existing as well as pending climate change legislation and regulation;
- the impact of international accords and treaties on climate change or greenhouse gas emissions;

- the actual and potential indirect consequences of climate change regulation or business trends (*e.g.*, reduced demand for carbon-intensive products); and
- the actual and potential impacts of the physical effects of climate change.

With respect to the first item – new laws governing greenhouse gas emissions – the SEC stressed that, in its view, the traditional analysis under Item 303 required consideration of climate change legislation as a trend or uncertainty if a company could not determine that the legislation was not likely to pass.

Beyond these focal points, the Commission devotes many pages of the guidance to laying out the existing structure of environmental disclosure under the SEC laws, as well as to surveying the current knowledge base concerning climate change.

The Commission adopted the guidance by a 3-2 vote. Since the text of the guidance was not provided at the time the Commission voted, the Commissioners' individual statements about the guidance and its adoption were of heightened interest – especially when it became clear that the three Commissioners voting in favor of the guidance had different perspectives on what the guidance said and why it should be adopted. Chairman Schapiro spoke first. She noted that the guidance would not create new legal requirements and was intended to produce greater clarity and consistency in disclosure. She stressed that the Commission offered no opinion on the existence or timing of climate change itself and was not amending the well-defined rules on disclosure or longstanding guidance with respect to materiality. Chairman Schapiro observed that "of course" companies must consider potential legislation, which, if likely to pass, must be disclosed if impact would be material.

Commissioner Casey wasted no time in staking out a strong contrary position. She inveighed against the misdirection of the SEC's effort in light of more pressing priorities, and she decried the political agenda that appeared to be at work in issuing a major guidance document that is both unneeded and unhelpful to the broad shareholder community. Furthermore, Commissioner Casey questioned why climate change merited specific guidance, especially since the Commission had made no finding that climate change disclosures to date were inadequate.

Commissioner Walter disagreed strongly with Commissioner Casey and emphasized that the guidance was driven by investor needs and by the merit of encouraging companies to redouble their efforts to comply with existing disclosure obligations. Commissioner Walter expected to see immediately stepped-up efforts in light of the guidance, even though it was not intended to change the standard of materiality for disclosure. Like Commissioner Walter, Commissioner Aguilar approved the guidance, since it satisfies a pressing need of investors in the wake of the IPCC's unequivocal determination that climate change poses a real and dangerous threat. The Commissioner emphasized that management's discussion and analysis of threats should reflect that the company has an effective system for gathering and understanding carbon footprint. He also stressed that companies should err in favor of disclosure and that the Commission would play a larger role in the area of climate change in the future.

Commissioner Paredes, the final commissioner to speak, provided a calm but concerned commentary focused on the risk that the guidance would induce more-speculative disclosure.

The danger in the guidance resided largely in the Commission's failure to recognize the uncertainties and evolving nature of legislative and other developments that define the parameters of risk relevant to public company disclosure.

What Does the Guidance Mean?

The key question for reporting companies is whether the guidance changes the existing approach to evaluating climate change risks for purposes of disclosure under Regulation S-K. Even the Commissioners who supported the guidance (perhaps especially these Commissioners) acknowledged that the guidance does not – and legally cannot – modify the existing laws governing disclosure. Yet, as Commissioner Paredes recognized, the SEC appears conflicted in its intention to change disclosure practice with respect to climate change while professing no change to the governing disclosure rules.

Taking the Commission at its word that no change in the existing disclosure rules is either intended or accomplished by the new guidance, it is useful to consider what the Commission has *not* done.

- The SEC did not change the existing framework of disclosure laws.
- The traditional standard of materiality still applies to climate change disclosure.
- Climate change disclosure still requires a case-by-case evaluation of materiality.
- The SEC did not make a finding that existing climate change disclosures have been inadequate.
- The SEC is not making it mandatory to disclose carbon footprint or other measures taken to reduce greenhouse gas emissions.
- The SEC did not express an opinion about the existence of global warming (although Commissioner Aguilar did emphasize the threat of global warming as a justification for the SEC's action).

Is it then a surprise to find relatively few changes in the substance and detail of climate-related disclosures in the first round of annual reports on Form 10-K to appear since the guidance was issued?

Doubtless contributing to the relative stasis in disclosure practice in the immediate aftermath of the guidance was the dynamic nature of the legislative discussion about greenhouse gas emission limitations. Between January and June 2010, the fortunes of climate change legislation in Congress clearly declined into ever greater uncertainty, before being eclipsed in the public's eye by the catastrophic blowout at the Deepwater Horizon oil rig in the Gulf of Mexico. With even less certainty surrounding what might be the chief factor in determining costs and strategies surrounding climate change, the application of the traditional analytical framework for assessing risk and materiality under Regulation S-K would not have resulted in more, nor more detailed, disclosure about climate change risks. What is interesting to note is that the presence of the SEC's new guidance seemed not to alter substantially the result of this traditional analysis.

Now that the first round of post-guidance annual reports is out, reporting companies are apt to turn to what may in the end prove the most important aspect of the guidance, though the Commission relegated it to a footnote. Buried in the guidance is the observation, captured in

footnotes 62 and 71, that controls and procedures under Sarbanes-Oxley should encompass risks associated with climate change in all its relevant dimensions. In essence, the SEC pointed in the direction of a governance model for managing climate-related risks in business. The SEC expects companies to keep themselves well-informed about climate change, about the progress of climate legislation and international treaties, and about corporate facts such as carbon footprints. Now that the 10-K season has concluded, public companies will likely refocus on the adequacy of their governance systems with respect to climate change.

The significance of this point about governance is that the Commission has tapped a powerful enforcement tool – Sarbanes-Oxley – to augment its oversight of environmental disclosures. While Sarbanes-Oxley has always encompassed environmental issues as much as any other issue, the guidance is the first indication that the SEC intends to look expressly for environmental governance structures with respect to environmental issues, in particular climate change. Thus, regardless whether a company's traditional analysis of climate-related risks results in substantial or flimsy disclosures, the SEC can and presumably will look into the governance structures that lie behind the company's understanding of climate-related risks. Whether the SEC feels that this deeper inquiry is worthwhile as a stand-alone basis for inquiry, or is largely an adjunct investigation if other matters at the company are already being investigated, remains to be seen.

Final Thoughts

Recognizing that the guidance is new and is still being digested by the reporting community, one can still venture some conclusions about the areas that may prove most problematic in the future. Chief among these is the tension inherent in the guidance (and in the supporting Commissioners' statements) between, on the one hand, the heightened expectation of new and different climate disclosure that the guidance seems to invite and, on the other hand, the unchanged analytical framework for developing environmental disclosures. Public companies, uncertain how to "read" the SEC's guidance, might converge toward a more sensitive (*i.e.*, lower) standard of materiality for climate change risk as a hedge against SEC enforcement scrutiny rather than as a response to perceived climate change risk. It would a great and sad irony indeed if the SEC's guidance led companies to speculate more about a complex set of risks at a time when the public is seeking greater confidence in financial markets.

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DEALING WITH ENVIRONMENTALLY-IMPACTED FINANCIALLY-DISTRESSED ASSETS

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TABLE OF CONTENTS

I. Overview 1

II. As If It Isn't Enough to Have a Non-Performing Loan 2

A. Applicable Environmental Laws 2

1. Federal Law 3

a. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") 3
b. The Resource Conservation and Recovery Act ("RCRA") 3
c. Other Federal Laws 4

2. State Law 4

B. Secured Creditor Exemption 4

1. Participation in Management 6
2. Post Foreclosure Requirements 8

a. Federal Law 8
b. State Law 8

3. Judicial Authority 9

C. Limitation of Fiduciary Liability 10

III. Disposition of Environmentally-Impacted Collateral 11

A. Recovering Value from Collateral – Pre-foreclosure Consideration 11

1. Sale of Note 12
2. Short Sale 12
3. Assignment to Special Purpose Entity 12
4. Receivership 12

B. Recovering Value from Collateral Through Sale Following Foreclosure....12

1. Risk Allocation....13
2. Environmental Insurance....13
3. Due Diligence....14
4. Other Matters....15

IV. Wrap Up....15

V. Endnotes....16

DEALING WITH ENVIRONMENTALLY-IMPACTED FINANCIALLY-DISTRESSED ASSETS

John Slavich

I. OVERVIEW

As we are all painfully aware, the effects of the economic downturn that began in earnest in September of 2008 have rippled through the United States economy. Lenders are dealing with the fallout from the sudden deflation of a property asset bubble. Economic conditions have adversely impacted borrowers' ability to repay loans, and the value of assets held as collateral has tumbled. A report released several months ago by the Congressional Oversight Panel stated that since 2007, property values have fallen by an average of 40%, and of the $1.4 trillion in commercial mortgage debt to come due through 2014, about half of the loans are underwater with the borrowers owing more than their properties are currently worth.

As a result, lenders are having to deal with issues that have not presented a significant problem in Texas since the 1980s. A lot of the hard-earned institutional knowledge from that era has dissipated in the interim, and a new generation is having to grapple with the issues relating to financially-distressed assets.

This paper will focus on the complicating issues that arise when property held as collateral by lenders is, or is suspected of being, impacted by environmental concerns. Impacts may occur in various ways: spills or releases of contaminants through business operations (such as underground storage tanks or dry cleaning plants); the presence of contamination from historic operations at a site; migration of contaminants onto the site from offsite sources; or hazardous substances incorporated in building materials (such as asbestos) or components (such as PCBs).

Environmentally-related concerns can adversely impact not only the value of the collateral held by the lender, but also the ability of the lender to dispose of the collateral, if it should prove necessary, to cover loan losses. Also of significant concern to lenders is the possibility of exposure to environmental liability under statutory provisions that can impose strict, joint and several liability on a lender based on its "status" with respect to a contaminated site, not because of any wrongdoing by the lender. That type of status liability has the potential of exceeding the value of the collateral from which the liabilities arise. Lenders arguably enjoy the best insulation from such liabilities of any person in the universe of "potentially responsible parties" under environmental statutes. However, this insulation may be less than meets the eye. The statutory defenses that provide the insulation do not provide comprehensive protection, and there are no bright-line standards to comfort a lender that it has performed the required actions necessary to qualify for applicable defenses.

This paper will briefly consider administrative processes lenders can use to manage environmental risks and liabilities. It will then look at liabilities that can potentially arise under the various environmental statutes and defenses that may be available to lenders. Finally, it will

wrap up by looking at considerations that arise in connection with the disposition of environmentally-challenged collateral.

II. AS IF IT ISN'T ENOUGH TO HAVE A NON-PERFORMING LOAN

Lenders tend to operate at the conservative end of the risk spectrum. As I have been reminded time and again during deal negotiations, a lender's best-case scenario is having the loan principal repaid with interest. Consequently, when considering the risk/reward equation, lenders generally take the position that a limited reward potential is appropriately balanced by a lower risk tolerance.

In originating a loan, lenders will focus on repayment risk as well as the risks that may arise out of the borrower's operations and assets. Lenders typically manage those risks by, among other things, taking an interest in collateral as security for the borrower's repayment of the loan.

As a result of risks posed, many lenders establish an environmental risk policy to help guide decisions. The components of these policies can involve:

- A process to identify and evaluate environmental risk when a loan is originated. Lenders should look at how environmental costs and other obligations may adversely impact the borrower's ability to repay the loan. Lenders should also look at properties being considered as collateral for the loan, particularly where operations of potential concern have been conducted or are being conducted. This process includes establishing due diligence protocols and other guidelines for appropriate inquiry into the uses of the property and for other protective actions to satisfy the "all appropriate inquiry" component of certain statutory defenses available under federal law, as discussed later in this paper.

- A process to monitor the environmental status of the borrower's operations and the collateral throughout the life of the loan.

- A process to reconsider and reanalyze environmental risk of non-performing loan collateral, including alternative strategies for recovering the value of collateral both without foreclosure and utilizing foreclosure.

- A process for addressing risks post-foreclosure.

A. Applicable Environmental Laws

Some of the environmental laws that drive lenders' risk concerns are summarized below to provide a framework for later analysis in this paper.[1]

1. Federal Law

a. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA")[2]

The CERCLA statute provides a broad legal framework that creates potential liability for the cost of cleaning up property contaminated with hazardous substances. Persons that may be potentially responsible for liability under CERCLA (also referred to as Superfund) include:

- the current owner and/or operator of a facility;
- an owner and/or operator of a facility at the time of disposal of any hazardous substances;
- a person who arranged for the disposal or treatment of hazardous substances, or arranged for transportation of hazardous substances for disposal or treatment; and
- a person who accepts hazardous substances for transport to a site and selects the site.

Liability under CERCLA is strict (without fault being necessary) and is joint and several, which can expose a responsible party to the entire cost of the cleanup even if that party is not the only responsible party. Actions may be brought by the government or by third parties.

Of particular interest to lenders is the "secured creditor exemption" under CERCLA, discussed in more detail in Subsection B, below. The secured creditor exemption can provide qualifying lenders with an exemption from status as an "owner or operator" even in situations where the lender forecloses and takes title to a property.

CERCLA also provides limited defenses to liability for certain qualifying purchasers of property with known contaminants.[3] One of the requirements necessary in order to qualify as a "bona fide prospective purchaser" is that the person conduct "all appropriate inquiry" ("*AAI*") prior to purchasing, or taking title to, property. The AAI standard[4] will require that an appropriate Phase I environmental site assessment be conducted prior to property acquisition. There are also continuing obligations that an owner must then meet during their ownership to maintain bona fide prospective purchaser status.[5]

b. The Resource Conservation and Recovery Act ("RCRA")[6]

Another federal law that can impose liability as a result of contamination is RCRA. RCRA governs hazardous waste from the time it is generated through storage, transportation, and ultimate disposal. Under certain conditions, RCRA also requires the cleanup of property contaminated with hazardous waste. Many states have been delegated the authority to establish and administer their own RCRA programs.

Of particular importance to lenders is the fact that underground storage tanks ("*USTs*") are regulated under RCRA and its state counterparts. USTs will many times be part of the collateral for loans not only for gas stations and convenience stores, but also for other property with industrial or commercial operations. Lenders need to be concerned about compliance with applicable laws regarding the installation, operation, and removal of USTs. The federal secured creditor exemption is also available to provide qualifying lenders with an exemption from status as an "owner or operator" of USTs under RCRA.[7]

c. Other Federal Laws

Other federal environmental laws, such as the Clean Air Act, Clean Water Act and the Toxic Substance Control Act,[8] can also create liability. The potential for liability under these laws will depend upon the type of operations conducted at a property and other factors.

2. State Law

Many states have adopted statutes that parallel the federal provisions, including the secured creditor exemption. When the administration of federal programs is delegated to a state, the state's laws and regulations must be at least as stringent as federal provisions. States are not, however, limited only to addressing those provisions contained in the federal laws and regulations. State provisions can impose additional requirements that a lender must meet to receive protection under defenses and exemptions similar to those provided by the federal secured creditor exemption discussed above.

The Texas rules governing USTs[9] provide an example of a situation where the state regulatory provisions are more stringent than both the federal and the state statutory provisions. In particular, the Texas UST rules require a lender to begin removal of any underground tank from service within ninety days of the time that the lender forecloses or becomes owner of the property.[10] In addition, under the Texas UST rules, the lender becomes liable as an owner or operator of that property at the end of twelve months if the lender has not sold the property by then. [11]

B. Secured Creditor Exemption

As previously noted, lenders may incur status liability under CERCLA, RCRA, and state-counterpart environmental laws by owning or operating a given property, or satisfying another one of the categories that impose status liability. Section 101(20) of CERCLA has always provided a liability exemption for secured interest holders, excluding from the definition of an "owner or operator" lenders that without participating in the management of a facility hold indicia of ownership primarily to protect a security interest in the facility. (This exclusion from liability does not extend to the other statutory categories under which a lender could incur liability as a responsible party.) CERCLA, as originally drafted, did not, however, provide for an explanation of the scope of that liability exemption.

The potential risk exposure under the status liability provisions of federal and state law were brought home to lenders in the *Fleet Factors* case.[12] That case held that the CERCLA liability exemption for lenders was not available in situations where the lender was in a position to participate in financial management of a facility to a degree indicating a capacity to influence a borrower's waste disposal decisions, even if the lender did not actually exercise that control.

The United States Environmental Protection Agency ("*EPA*") responded to lenders' concerns about potential liability exposure under the *Fleet Factors* case by promulgating a rule in 1992 purporting to interpret the CERCLA liability exemption for lenders.[13] The rule clarified that actual conduct rather than the ability to influence conduct generally was necessary before liability would attach to lenders. The EPA's rule was, however, invalidated in 1994 in *Kelly v. EPA*[14] on the grounds that EPA exceeded its authority in promulgating a rule that extended beyond the bounds of the statute. Following the *Kelly* decision, the EPA and the Department of Justice issued a joint policy stating that they would nonetheless follow the vacated rule. Congress subsequently amended CERCLA and RCRA when they adopted the Asset Conservation, Lender Liability and Deposit Insurance Protection Act of 1996 (the "*1996 Amendments*"). The 1996 Amendments, which are generally viewed as a codification of the concepts in the invalidated EPA rule, added language intended to clarify the scope of the liability exemption for lenders as well as protections for fiduciaries discussed in Subsection C, below.[15]

The 1996 Amendments expressly state that the secured creditor exemption applied to any person "that is a lender" that did not "participate in management."[16] The term "lender" was broadly defined to include:

- insured depository institutions;
- insured credit unions;
- a bank chartered under the Farm Credit Act of 1971;
- a leasing or trust company that is affiliated with an insured depository institution;
- any person making a bona fide extension of credit to or taking or acquiring a security interest from a nonaffiliated person;
- the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Federal Agricultural Mortgage Corporation, or another entity that in a bona fide manner buys or sells loans or interests in loans;
- persons that insure or guarantee against a default in the repayment of an extension of credit, or act as surety with respect to an extension of credit to nonaffiliated persons; and
- persons that provide title insurance and that acquire a facility as a result of assignment or conveyance in the course of underwriting claims.[17]

In addition, the 1996 Amendments addressed two important questions left open after the EPA's rule had been vacated: (1) what is "participation in management"; and (2) whether foreclosure would render a lender an "owner or operator" for status liability.

1. Participation in Management

A lender must not participate in the management of a facility pre-foreclosure if it expects to qualify for the federal secured creditor exemption. For purposes of the secured creditor exemption, the term "participate in management" includes actually participating in the management or operational affairs of a property. Merely having the opportunity to influence or control operations is not sufficient; the lender must actually exercise control.

The language of the secured creditor exemption provides that a lender will be considered to have participated in management if, while the borrower is still in possession of the property, the lender does any of the following:

- exercises decision-making control over the environmental compliance related to the property, such that the lender has undertaken responsibility for the hazardous substance handling or disposal practices related to the property; or

- exercises control at a level comparable to that of a manager of the property, such that the lender has assumed or manifested responsibility:

  - for the overall management of property encompassing day-to-day decision making with respect to environmental compliance; or

  - over all, or substantially all, of the operational functions (as distinguished from financial or administrative functions) of the property other than the function of environmental compliance.[18]

The language of the secured creditor exemption also provides that a lender can perform the following acts which do not rise to the level of participating in management:

- holding a security interest or abandoning or releasing a security interest;

- including in the loan documents a covenant, warranty, or other term or condition that relates to environmental compliance;

- monitoring or enforcing the terms and conditions of the loan documents;

- monitoring or undertaking inspections of the property;

- requiring a response action or other lawful means of addressing the release or threatened release of a hazardous substance in connection with the property prior to, during, or on the expiration of the term of the loan;

- providing financial or other advice or counseling in an effort to mitigate, prevent, or cure default or diminution in the value of the property;

- restructuring, renegotiating, or otherwise agreeing to alter the terms and conditions of the loan, or exercising forbearance;

- exercising other remedies that may be available under applicable law for the breach of a term or condition of the loan; or

- conducting a response action under §107 of CERCLA under the direction of an on-scene coordinator appointed under the National Contingency Plan.[19]

Under the 1996 Amendments, CERCLA provisions noted above were also extended to provide a secured creditor exemption under the provisions in RCRA that relate to owners and operators of USTs.[20]

State statutes and regulations also impose separate requirements in order to qualify under state counterparts of the federal secured creditor exemption. Those requirements may differ from the requirements of the federal secured creditor exemption, so compliance with the federal provisions will not guarantee compliance with state provisions.

The statutory provisions of the Texas Solid Waste Disposal Act[21] that generally parallel CERCLA in scope include a secured creditor exemption that generally follows the exemption provisions in CERCLA, but relate to solid waste facilities in particular and hauling and disposal of solid waste in contrast to the hazardous substances covered by CERCLA. Additionally, a response action by the lender can also be performed under a cleanup plan approved by Texas Commission on Environmental Quality ("*TCEQ*").

In contrast, the Texas statutory and regulatory provisions that provide a limit on the liability of lenders that hold a security interest in USTs or aboveground storage tanks do not track the secured creditor exemption provisions in the Texas Solid Waste Disposal Act noted above. The statutory provision that most closely relates to the secured creditor exemption provides that:

> "A lender that exercises control over a property before foreclosure to preserve the collateral or to retain revenues from the property for the payment of debt, or that otherwise exercises the control of a mortgagee-in-possession, is not liable as an owner or operator . . . unless that control leads to action that [TCEQ] finds is causing or exacerbating contamination associated with the release of a regulated substance from a tank located on the property."[22]

The statute also recognizes that a lender can remove a tank from service or take corrective action at any time before foreclosure, but that the corrective action must be performed in accordance with requirements adopted by TCEQ.[23] In order for the limitation to apply to a lender after foreclosure, the statute requires that such lender "did not participate in the management of the aboveground or underground storage tank or real or personal property related thereto before foreclosure," but does not spell out what that participation may involve.[24]

An additional issue related to pre-foreclosure actions by a lender involves the rights it holds under the various documents that make up the loan agreement. Although it would be expected that a secured lender is afforded broad rights under the documents that grant the security interest, this is not always the case. Counsel for lenders should review all relevant documentation before advising lenders about rights they may have to enter the property, whether to perform subsurface investigation or to undertake environmental response actions.

2. Post-Foreclosure Requirements

a. Federal Law

In order for a lender to preserve their secured creditor exemption post-foreclosure, the lender must not have "participated in management" of the facility prior to foreclosure[25] and it must divest themselves of the property at the earliest practicable, commercially reasonable time on commercially reasonable terms taking into account market conditions and legal and regulatory requirements.[26] While CERCLA does not specifically address "commercially reasonable," current EPA guidance indicates that the lender must attempt to sell, re-lease, or otherwise divest itself of the property within 12 months of foreclosure.[27] If the lender meets this standard, then it may generally maintain business activities; wind up operations; and take actions to preserve, protect or prepare the property for sale so long as the lender lists the property with a broker or advertises it for sale in an appropriate publication.[28] The lender may also be able to qualify as a "bona fide prospective purchaser" provided that it can demonstrate that it conducted "all appropriate inquiry" into the property prior to foreclosure and subsequently took the necessary steps to stop any continuing release; prevent any threatened future release; and prevent exposure to previously released hazardous substances.[29]

b. State Law

The Texas Solid Waste Disposal Act provides similar protection to lenders that foreclose on contaminated property, but provides specific detail as to how the property is listed or advertised for sale, when the 12-month period begins (e.g. the date of foreclosure or when marketable title is acquired), and the actions the lender may take without becoming an owner or operator.[30] With respect to underground and aboveground storage tanks, the lender has an additional obligation to remove the tanks from service and complete any corrective action in response to any release from the tank.[31] Removal or corrective action must begin within ninety days from the time the lender becomes the owner of the property.[32] Furthermore, a lender becomes the owner of an underground or aboveground storage tank at the earlier of 12 months

from when the lender forecloses or acquires marketable title, or when ownership is no longer held to protect a security interest, even though the lender complied with the other requirements.[33]

3. Judicial Authority

Only a handful of courts have analyzed a lender's pre- or post-foreclosure activities to determine whether it had lost the protections of the secured creditor exemption. With respect to pre-foreclosure activities, courts have tended to enforce the exemption even when faced with facts which indicate some degree of participation in management. For instance, in *Z & Z Leasing v. Grayling Reel*, the court held that a lender did not participate in management even though it had caused environmental surveys to be conducted on the property, had its environmental consultant remove underground storage tanks, and reported a release of hazardous substances to the state.[34]

However, in *United States v. Mirabile*, the court denied a bank's motion for summary judgment that it had not participated in management based upon evidence that a loan officer was "always" present at the site, perhaps visiting the plant once a week.[35] In addition, there was evidence that the bank stated that the borrower would have to accept the day-to-day supervision if it wanted to continue operations with bank funds. The loan officer purportedly also came to the site frequently and insisted on certain manufacturing changes and reassignment of personnel. In addition, recently in *New York v. HSBC USA, N.A.*, the State of New York claimed that the lender did not qualify for the exemption because it had obtained control over the operating funds of the borrower which allegedly prevented it from complying with its environmental obligations.[36] The lender had purportedly instituted a lock box arrangement with the borrower which permitted it to disburse funds on behalf of the borrower. Allegedly, the lender failed to make certain disbursements which led to environmental non-compliance for the borrower. The matter ultimately settled so the court did not opine on the situation presented. Nonetheless, the case presents a not-uncommon set of facts in the context of the "participation in management" standard.

With respect to post-foreclosure activities, there is also very little guidance and no bright line rule as to what constitutes commercially reasonable efforts by a lender to divest itself of property. Nonetheless, courts have found the secured creditor exemption applies if the lender reasonably promptly attempts to sell the property. For instance, in *Bancamerica Commercial Corp. v. Trinity Industries, Inc.*, the court concluded that the efforts were sufficiently prompt even though the lender had rejected three offers that were less than the loan amount owed on the property because soon after the lender took the deed in lieu of foreclosure, it listed the property with an agent, who actively tried to sell the property soon thereafter. [37] In *United States v. Pesses*, however, the lender lost the exemption where it took control of the property post-foreclosure for over two years, took over responsibility for security of the property, hired people to clean up the plant and perform maintenance tasks, received assigned rent payments from the local development authority, and made arrangements to lease part of the facility to a new lessee when the debtor defaulted.[38] In addition, in *XDP, Inc. v. Watumull Properties Corp.*, the court held that based upon the totality of the facts, there was a question of fact as to whether the lender

was merely protecting its security interest or actively involved in the management of the facility after it acquired the property.[39]

C. Limitation of Fiduciary Liability

The 1996 Amendments also provide that the liability of fiduciaries is expressly limited to the assets held in a fiduciary capacity, but only if there is no independent basis for liability other than ownership as a fiduciary or actions taken in a fiduciary role.[40] There is also a carve out of liability for the negligent action of the fiduciary that "cause or contributes to the release or threatened release" of hazardous substances.[41]

A fiduciary is specifically defined to include any person acting for the benefit of another as a bona fide: (1) trustee; (2) executor; (3) administrator; (4) custodian; (5) guardian of estates or guardian ad litem; (6) receiver; (7) conservator; (8) committee of estates of incapacitated persons; (9) personal representative; (10) trustee acting under an indenture agreement, trust agreement, lease or similar financing agreement for debt securities, certificates of interest or certificates of participation in debt securities, or other forms of indebtedness as to which the trustee is not, in the capacity of trustee, the lender; or (11) representatives in any other capacity that the EPA Administrator, after public notice, determines to be similar to the capacities listed above.[42]

The 1996 Amendments also establish a "safe harbor" for the purpose of describing actions that will not give rise to personal liability to the fiduciary if the fiduciary is:

- undertaking or directing other persons to undertake a response action under §107(d)(1) of CERCLA or under the direction of a coordinator appointed under the National Contingency Plan;
- undertaking or directing another person to undertake lawful means of addressing a hazardous substance at the facility;
- terminating the fiduciary relationship;
- including in the terms of the fiduciary relationship a covenant, warranty or other condition that relates to compliance with an environmental law or monitoring, modifying or enforcing a term or condition;
- monitoring or undertaking inspections of the facility;
- providing financial or other advice or counseling to other parties to the fiduciary relationship, including the settlor or beneficiary;
- restructuring, renegotiating or otherwise altering the terms and conditions of the fiduciary relationship;

- administering as fiduciary, a facility that was contaminated before the fiduciary relationship began; or

- declining to take any of the actions described above, with the exception of those related to response actions.[43]

However, fiduciaries are specifically excluded from the benefits of the 1996 Amendments when a person: (a) is acting as a fiduciary with respect to a trust actively carrying on a business for profit, unless the trust was created due to the incapacity of a natural person; or (b) acquires ownership or control of a facility in order to avoid liability.[44]

III. DISPOSITION OF ENVIRONMENTALLY-IMPACTED COLLATERAL

At some point in time, the lender may need to consider disposition of collateral it holds for non-performing loans. If attempts to restructure the loan terms through a workout are unsuccessful and the lender wants to salvage value from the collateral it holds (as opposed to abandoning its interest in the collateral due to concerns about exposure to environmental liabilities), it will be faced with a decision of how to proceed.

Foreclosure will put the lender in the chain of title for contaminated property. If the lender qualifies for the secured creditor exemption, it creates an anomalous situation where the lender holds title to property, but is not considered an "owner" of that property for status liability purposes. There are instances I am aware of where a lender inadvertently stepped into unexpected obligations by foreclosing on property. One example is the affirmative requirements noted earlier imposed on a foreclosing lender under Texas statutory and regulatory provisions relating to USTs. Additionally, foreclosing lenders have been hit with the cost of storm water control obligations where they have foreclosed on uncompleted property developments. Also, water intrusion into structures can require action, and related cost, to avoid mold contamination and preserve the value of the foreclosed collateral.

Consequently, lenders may look to strategies that do not involve foreclosure so they can effectively avoid risk associated with ownership and without being concerned as to whether they have satisfied the requirements necessary for compliance with the secured creditor exemption. In some cases, a lender faced with environmentally-impacted collateral may forego foreclosure and instead sue the debtor on the underlying note or the guarantor of the secured debt on its guarantee so the lender does not become the owner of the property covered by its deed of trust lien.

A. Recovering Value from Collateral – Pre-foreclosure Considerations

Strategies a lender may consider that do not require it to foreclose on property, or at least minimize its exposure from foreclosure, include the following:

1. Sale of Note

One approach is to sell the underlying note and assign the related security interest in the collateral to a third party. There is an active market of investors interested in pursuing a variant of that transaction – referred to as "loan-to-own." In that case, a party acquires a note collateralized by property. If the loan goes into default, the assignee can exercise its rights under the loan documents to foreclose on property that secures the note. By selling the note, the lender avoids potential liability and other issues that could arise by foreclosing on the collateral. Note, however, that the assignee of the note will not qualify for the secured creditor exemption if it intends to use foreclosure to acquire the property for investment.

2. Short Sale

The lender may also facilitate a short sale of the collateral by the defaulting borrower directly to a third-party purchaser. In that transaction, the lender will agree to take a loss on the loan in exchange for the sales proceeds from the sale of the collateral being applied against the outstanding loan balance. Under this strategy, the lender recovers some of the value provided by the collateral, but avoids being in the chain of title for the collateral sold.

3. Receivership

The loan documents may include, as one of the lender's remedies that arise upon default, a right to appoint a receiver for the collateral. Receivership would appear to offer a way for a lender to have an unaffiliated third party, under supervision of the court, address environmental issues at the property that serves as loan collateral, without the lender being deemed to have participated in management of the property.

4. Assignment to Special Purpose Entity

In order to better insulate itself from environmental liability, lenders may choose to assign the loan and its lien to an affiliated special purpose entity in advance of foreclosure. That strategy attempts to isolate in the special purpose entity liability that may arise from the environmental conditions of the property acquired through foreclosure.

B. Recovering Value from Collateral Through Sale Following Foreclosure

In the event the lender forecloses on property, rather than pursuing one of the avenues noted above, the lender will need to actively market the collateral it has acquired in order to qualify for the post-foreclosure protection offered by the secured creditor exemption under federal and state law. With the onset of the economic downturn, many investors anticipated that lenders would be offering foreclosed properties at significant discounts to the values the lenders show on their books. That was certainly the case during the savings and loan/banking crisis in Texas in the 1980s. For a number of reasons, that has not been the case, at least so far, during the current economic downturn. While lenders may be in the market to sell collateral (and be

especially motivated for publicly-reporting or regulatory purposes to sell as the end of their fiscal quarters approach), the spread between the lenders' asking price and the bid prices investors offer remains significant. That being said, deals are getting done.

A number of environmentally-related matters that selling lenders and purchasing investors may want to consider in negotiating their deals are discussed below:

1. Risk Allocation

The allocation of environmental risks and liabilities is an important consideration in deal negotiations. The lender will, at a minimum, want to sell property on an "as is" basis. Under Texas law, an "as is" sale is considered a recognition that the seller is giving no representations regarding the property other than those relating to title or otherwise specifically listed in the contract of sale. An "as is" sale is intended to serve as a bar to later claims by a buyer based upon breach of a representation.

An "as is" sale will not, however, bar a purchaser from performing cleanup at a property it purchases on an "as is" basis and then suing responsible parties, including the lender, under the cost recovery provisions of the Texas Solid Waste Disposal Act.[45] Consequently, in selling property acquired through foreclosure, the lender would be expected to require a release of liability from the buyer, which would bar the buyer from making cost recover, or other, claims against the selling lender.

Lenders may also request contractual indemnification from the buyer. The purpose of indemnification is to protect the lender from third-party claims, since the release would bar the buyer's first-party claims. Among other things, indemnification would provide protection for cost recovery claims from subsequent purchasers that will not be bound by the release provided to the lender by the original buyer.

2. Environmental Insurance

If a buyer is not willing to provide an indemnity, or if an indemnity is of limited value because of the buyer's lack of financial wherewithal, the lender may want to consider an environmental insurance policy. Insurance can allow environmental risks to be allocated to a regulated entity that is not a party to the purchase transaction and that has demonstrated financial wherewithal. But environmental insurance may have other limitations that a lender selling collateral may find unattractive in comparison to a contractual indemnity from the buyer. An insurance policy will have specified coverage limits and a specified term. In contrast, indemnification provisions in the purchase and sale agreement can be negotiated so there is no monetary limit on coverage and no time limit on the indemnity obligation. Additionally, there are contractual exclusions in environmental insurance policies that may limit their usefulness. One significant issue is a carve-out of coverage for cleanup costs for known pollution conditions, the so-called "burning building" for which insurers will not provide coverage. Finally, the cost

of the policy may make it an unattractive alternative to contractual indemnification from the buyer.

3. Due Diligence

One investor looking to purchase distressed assets from lenders had told me that if his investment group was successful in negotiating a substantial discount on the purchase price, they probably would not be conducting their own environmental due diligence. His rationale was that the lender would have performed due diligence at the time the loan was made, and the borrower would have also performed due diligence in acquiring the assets serving as collateral. That approach to risk analysis appears to be short-sighted for a number of reasons. The most obvious one is that the issues of concern are dynamic. There might have been changes in onsite and offsite conditions since previous due diligence was undertaken. An issue of particular concern is whether a borrower in financial distress may have ceased using its operating capital on environmental compliance and disposal of wastes, either of which could result in new environmental conditions affecting the property that serves as collateral. Even historic conditions may have increased because of exacerbating circumstances. Additionally, there is broad acknowledgment that the loan underwriting standards of many borrowers deteriorated in the years preceding the economic downturn. There is no reason to believe that environmental components of underwriting standards avoided that trend. Finally, not all environmental consultants out in the market are competent. There are a number of consulting firms whose work is immediately suspect to me, based on reports I have reviewed in the past.

Before lenders foreclose, they should understand the then-current condition of the property and risks and liabilities that may arise out of their ownership of the property. That will usually involve obtaining an updated environmental assessment.

A potential buyer may want to utilize the lender's updated environmental assessment and also additional reports and other information from the lender's files. Unless the lender and its consultant agree to provide reliance on the reports, the buyer will have no recourse against the lender's consultant if there is a problem.

The bottom line is that buyers are well advised to use their own consultants to assess the collateral they plan to purchase. Not only is that a recognized best practice, but a report meeting AAI standards is necessary for a buyer's eligibility to utilize the bona fide prospective purchaser defense and other certain defenses under CERCLA. Additionally, the buyer may need to look at environmental issues that are outside the scope of the AAI standards. Examples of excluded matters include analysis of wetlands and endangered species issues, which will be of interest to buyers of undeveloped property, and asbestos, lead-based paint, and mold for properties with existing structures.

4. Other Matters

The secured creditor exemption requires the lender to make commercially reasonable efforts to divest itself of the property at the earliest practicable, commercially reasonable time. Because the lender's compliance with the requirements will necessarily be considered in hindsight, the lender is well advised to document its efforts to market the property. In particular, it should document its reasoning for rejecting any offer for the property. One particular situation of concern is where the lender is offered a price that appears to be commercially reasonable, but where there are other aspects of the offer that are not acceptable to the lender. One example would be where the lender insists upon a contractual indemnification from the buyer, but the buyer is unwilling to provide one.

In determining what to offer for a foreclosed property, the buyer will seek to adjust the price by an amount at least equal to the cost of environmental remediation. Unless the lender understands the site conditions, and in particular the potential remediation strategies and cost ranges related thereto, the lender can be foregoing significant recovery in selling the property. One technique we have used for our seller clients to assist in the marketing process is to create, with assistance of an environmental consultant, an analysis of the available strategies and ranges of costs associated therewith. The analysis, which is heavily caveated as to underlying assumptions and indicates that it is not intended as any type of representation or warranty concerning environmental conditions or remediation strategies, has served as a way for potential buyers to understand that there are ways in which regulatory closure can be accomplished at a contaminated site.

IV. WRAP UP

With the secured creditor exemption, lenders are arguably better protected than other parties that similarly may incur status liability under federal and state environmental laws. Nevertheless, that protection is not comprehensive, and there are a number of potential pitfalls that can make the secured creditor exemption unavailable. Lenders are well advised to establish an environmental risk policy that will provide guidance concerning environmental issues from loan inception throughout the life of a loan and in the event the borrower defaults on the loan.

If it is necessary for a lender to dispose of environmentally-impacted collateral in exercising its remedies under the loan, there are a number of considerations relating to the risks taken on by foreclosing on the property, rather than utilizing a strategy that will keep the lender out of the chain of title for the property. Finally, if the lender chooses to foreclose, it will want to consider carefully the structure of the deal to protect itself from legacy issues related to the property it held as collateral.

This paper was prepared July 2010 as a general discussion of the issues presented and is not to serve as, or to be relied upon as, legal advice. This paper would not have been completed without the assistance of Michael Goldman and Erika Erikson, my colleagues at Guida, Slavich & Flores, P.C. The views expressed in the paper are mine, and not of my law firm or its clients.

V. ENDNOTES

[1]The summary overview of a complex environmental legal area is not intended as a comprehensive discussion of applicable law, nor to serve as guidance for any particular situation.
[2] 42 U.S.C. § 9601 *et seq.* (2010).
[3] 42 U.S.C. § 9601(40).
[4] 40 C.F.R. Part 312 (2010).
[5] 42 U.S.C. § 9601(40).
[6] 42 U.S.C. § 6901 *et seq.* (2010).
[7] 42 U.S.C. § 6991(b)(h)(9).
[8] 42 U.S.C. § 7401 *et seq.* (2010), 33 U.S.C. §1241 *et seq.* (2010), and 15 U.S.C. § 2601 *et seq.* (2010) respectively.
[9] 30 T.A.C. 334.
[10] 30 T.A.C. 334.15(d).
[11] 30 T.A.C. 334.15(h).
[12] *United States v. Fleet Factors Corp.*, 724 F.Supp. 955 (S.D. Ga. 1988).
[13] 57 Fed. Reg. 18,344 (Apr. 29, 1992).
[14] *Kelly v. EPA,* 15 F.3d 1100 (D.C. Cir. 1994).
[15] 42 U.S.C. §§ 9601(20)(E), 9607(n)(5)(A)(i).
[16] 42 U.S.C. § 9601(20)(E)(i).
[17] 42 U.S.C. § 9601(20)(G)(iv).
[18] 42 U.S.C. § 9601(20)(F)(i)-(ii).
[19] 42 U.S.C. § 9601(20)(F)(iv).
[20] 42 U.S.C. 6991(b)(h)(9).
[21] TEX. HEALTH & SAFETY CODE ANN. § 361.701 *et. seq.* (Vernon 2010).
[22] TEX. WATER CODE ANN. § 26.3514(c) (Vernon 2010).
[23] *Id.* § 26.3514(e).
[24] *Id.* § 26.3514(f)(1).
[25] 42 U.S.C. § 9601(20)(E)(ii).
[26] 42 U.S.C. § 9601(20)(E)(ii)(II).
[27] *See* Question 5, EPA Office of Enforcement Compliance Assurance, "Superfund Frequently Asked Questions: Laws, Policy and Guidance," www.epa.gov/compliance/resources/faqs/cleanup/superfund/laws-faqs.html (last visited July 9, 2010. The guidance references EPA's 1997 policy that clarifies when EPA intends to use the 1992 CERCLA Lender Liability Rule and its preamble in interpreting CERCLA's lender provisions.
[28] 42 U.S.C. § 9601(20)(E)(ii)(II).
[29] 42 U.S.C. § 9601(35)(A)(i).
[30] TEX. WATER CODE § 26.3514(d); *see also* 30 T.A.C. 334.15.
[31] TEX. WATER CODE § 26.3514(d).
[32] *Id.*
[33] 30 T.A.C. 334.15(h).
[34] *Z & Z Leasing v. Grayling Reel*, 873 F.Supp. 51, 54 (E.D. Mich. 1995).
[35] *United States v. Mirabile*, 1985 WL 97 at *3 (E. D. Penn. 1985).
[36] *New York v. HSBC USA, N.A.*, (S.D. N.Y. No. 07-3160, 2007).
[37] *Bancamerica Commercial Corp. v. Trinity Industries, Inc.*, 900 F.Supp. 1427, 1457 (D. Kan. 1995).
[38] *United States v. Pesses*, 1996 WL 143875, at *3-4 (W.D. Pa. 1996).
[39] *XDP, Inc. v. Watumull Properties Corp.*, 2004 WL 1103023, at *18 (D. Or. 2004).
[40] 42 U.S.C. § 9607(n)(1).
[41] 42 U.S.C. § 9607(n)(3).
[42] 42 U.S.C. § 9607(n)(5)(A)(i)(I-XI).
[43] 42 U.S.C. § 9607(n)(4)(A)-(I).
[44] 42 U.S.C. § 9607(n)(5)(A)(ii).
[45]TEX. HEALTH & SAFETY CODE ANN. § 361.701 *et seq.* (Vernon 2010)*; see Bonnie Blue, Inc. v. Reichenstein*, 127 S.W.3d 366 (Tex. App.—Dallas 2004, no pet. h.).

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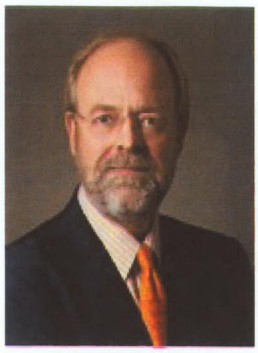
John Jacobi joined the Office of Pipeline Safety, Southwest Region in 2003 with over 20 years of natural gas and liquids pipeline experience. A professional engineer (TX) and licensed attorney (TX & FL), he began his career with the U.S. Army Materiel Command with assignments at Red River Army Depot and the Aviation Systems Command before becoming Chief Engineer, Lake City Army Ammunition Plant. His private sector experience includes 13 years with Tenneco Inc. and Tennessee Gas Pipeline (TGP) including stints as a Planning Manager, Manager of Technical Services, and as an attorney dealing with health, safety and environmental compliance issues for both Tenneco Inc. and TGP. He left Tenneco for a career as an environmental consultant focusing on regulatory compliance, pipelines and energy issues. At the state level, he served as Chief, Bureau of Environmental Health for the Texas Department of Health where he managed regulatory programs such as asbestos, lead in paint, hazardous communications, industrial hygiene, indoor air quality, general sanitation and product safety. He has also served as in-house counsel for a public bulk liquids storage facility on the Texas Gulf coast.

A former Presidential Exchange Executive, Mr. Jacobi received his Bachelor of Science in Mechanical Engineering (with Honors) from Rose-Hulman Institute of Technology, his Master of Science in Industrial Engineering from Texas A & M University, and his Juris Doctorate from the University of Missouri - Kansas City.

Mr. Jacobi resides in Houston with his wife of 42 years, Jane. In his spare time, he enjoys flying, golf and bridge.



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John Dugdale is a partner in the Environmental/Toxic Tort practice group of Gordon & Rees.

Mr. Dugdale advises and counsels clients on complex Superfund emergency response, remedial, and cost recovery/contribution matters as well as complex environmental regulatory matters arising under all environmental media. He has contested and resolved environmental regulatory matters and enforcement actions before federal agencies including the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the U.S. Forest Service, the U.S. Department of the Interior, and the U.S. Department of Justice, as well as state environmental agencies such as the Texas Commission on Environmental Quality, the Oregon Department of Environmental Quality, the Oregon Department of Justice, and numerous other state environmental regulatory agencies.

Mr. Dugdale has comprehensive experience handling all aspects of environmental regulatory compliance issues, including the formulation and implementation of strategies relating to permitting and compliance oversight of regulated facilities, the defense of permit challenges, and the negotiation and oversight of corrective action and voluntary cleanup projects. His Superfund practice includes work on all aspects of simple and complex Superfund emergency response and remediation sites, including those contaminated with dioxin and PCBs, and often includes the negotiation and resolution of natural resource damages claims among state, federal and Native American trustees. (He is currently engaged in one of the largest wide-area sediment contamination Superfund sites in the country, which is located in Portland, Oregon.) Finally, Mr. Dugdale assists in real estate and corporate transactions that involve the acquisition and divestiture of real property and assets that or may have current or legacy environmental liabilities, in securities transactions where environmental liabilities and the potential or mandate for the disclosure of

those liabilities are in issue, and in overseeing all aspects of Brownfield redevelopment projects.

Representative industries that have engaged Mr. Dugdale include: industrial and medical gas production, storage, and transportation; primary steel; primary brass; petroleum product terminalling and transportation; pipeline transportation; wind and other alternative energy production; hazardous and solid waste management; metals recycling; oil and gas exploration and production; small petroleum refining; and, electric power generation.

Mr. Dugdale previously served as the hazardous waste expert with the U.S. Environmental Protection Agency Headquarters' Criminal Enforcement Program. He also served as Senior Attorney in the Superfund Division of the Dallas Regional Environmental Protection Agency Office, where he continued his involvement with the criminal enforcement program on a part-time basis, and where he was involved extensively in criminal and civil judicial and administrative litigation.

Education

J.D., University of Maryland School of Law

B.A., Classics, The Johns Hopkins University

- Pew Memorial Scholar

Honors

The Best Lawyers in America, Environmental Law (2010)

Chambers USA: America's Leading Business Lawyers
Recognized as one of the leading Environmental lawyers in Texas (2009-2010)

Admissions

Texas
Maryland

Memberships

Texas Bar Association
Dallas Bar Association, Environmental Law Section (Chair and Officer, 1997-2004)
Maryland Bar Association
American Bar Association, Energy and Natural Resources Section
EPA Region 6 Brownfields Ad Hoc Advisory Group (2002-present)

Community Involvement

The Nature Conservancy of Texas, North Texas Advisory Board, Dallas, TX
The Pritchards Island (SC) Advisory Board
Connemara Conservancy (TX) Foundation, Board of Trustees and Land Committee
The Hugh Townley (VT) Foundation, Treasurer

Representative Experience

- **Complex Superfund Matters**

  A substantial amount of Mr. Dugdale's time is devoted to the Portland Harbor (OR) Superfund Site. That representation currently involves two-track negotiations relating to the recovery of costs incurred and to be incurred by the Environmental Protection Agency and the State of Oregon, the costs, to be borne by the potentially responsible parties ("PRPs"), for the performance of a cleanup, which is to be determined in late 2012 or 2013 and that may cost in excess of $3 billion, and as-yet unquantified costs for the restoration of natural resource damages.

  He has drawn on the expertise in remedial strategies for dioxin-contaminated sites he developed at the EPA and subsequently successfully challenged an EPA proposal to change a selected $20MM on-site cap-and-contain remedy at one of the most significant dioxin contamination sites in the country with an approximately $300MM off-site incineration remedy.

- **Resource Conservation and Recovery Act (Hazardous Waste) Matters**

  Mr. Dugdale has assisted several clients in devising and implementing cost-effective corrective action strategies to address pre-acquisition hazardous waste permit obligations of the prior owners of facilities ranging from as an oilfield and industrial drum reconditioner/recycler to the largest, and one of the oldest, marine petroleum product terminals on the Gulf of Mexico Coast.

  He has represented numerous clients with facilities that are subject to groundwater and solid waste management unit corrective action requirements. In most instances, Mr. Dugdale has successfully persuaded the regulators to enter into agreements requiring long-term monitoring and monitored natural attenuation instead of actual remediation, as had been the initial demand of those regulators.

- **Clean Air Act Matters**

  Mr. Dugdale minimized transactional and penalty costs during a lengthy period of negotiation with the Environmental Protection Agency and the State of Arkansas in a wide-ranging EPA Clean Air Act civil prosecution of steel mini-mill that is the largest non-utility air emission source in the State of Arkansas.

  In anticipation of EPA-driven scrutiny by the Texas Commission on Environmental Quality of fugitive volatile organic emissions from stationary sources, Mr. Dugdale represented the largest marine terminal on the Gulf Coast by proactively addressing the potential release of such emissions from

petroleum product tanks that were equipped with floating roofs. While this proactive approach resulted in the expenditure of substantial capital costs, other facilities ultimately were compelled to incur similar costs in the context of enforcement actions, where those costs and penalties deserved different tax treatment.

- **Clean Water Act Matters**

  Mr. Dugdale successfully represented a significant Outer Continental Shelf oil and gas producer in a negotiated settlement following the voluntary disclosure to the EPA of unpermitted produced water discharges that were detected during the implementation of a comprehensive environmental audit program he helped to develop.

  Mr. Dugdale has proactively represented a client in resolving the allegation of widespread stormwater runoff violations at the numerous carwash facilities belonging to a vehicle rental and leasing operation and located in a large southwestern city. Resolution of the matter, without the payment of a penalty, included the installation of advanced washwater collection systems and comprehensive employee training.

- **Criminal Environmental Enforcement Defense**

  Mr. Dugdale recently secured the dismissal of a 3-count indictment of a Harris County, TX client that related to the alleged discharge of waste into the waters of the State. As consideration for the dismissal, the client agreed to make a $10,000 donation to The Nature Conservancy of Texas, specifically in support of its Davis Mountains Preserve projects.

  Mr. Dugdale has represented corporate entities where allegations of individual employee criminal activity have had the potential to be raised against the corporate client. In those instances he has successfully implemented confidential internal investigations that have required the use of "control group" concepts, the hiring of independent counsel for board members and other officers, and the employment of strategies ethically to ensure the full cooperation of targeted employees. In addition, he has used his EPA criminal enforcement background to weaken prosecutions for failure to follow such internal government policies as those that govern parallel civil and criminal enforcement responses to the same targets for the same alleged misconduct.

- **Environmental Risk Strategies**

  Mr. Dugdale has assisted numerous clients in assessing the merits of commercial environmental risk- and loss-shifting products, such as pollution legal liability insurance policies, in both acquisition and divestiture contexts. Such representation has also involved the negotiation of the scope and price of such products.

Presentations

- *Environmental Issues in the Construction and Maintenance of Utility Facilities and Transmission Lines*
  Utilities Land Law seminar, Arlington, Texas (June 25, 2009)
- *Legal and Practical Aspects of Windfarm Project Development, Siting and Permitting in Texas*
  Society of Texas Environmental Professionals (November 11, 2008)
- *Land Revitalization/Brownfields/Superfund*
  16th Annual Texas Environmental Super Conference, Austin, Texas (August 5, 2004)
- *Emergency Response Issues Under Homeland Security*
  ConocoPhillips Incident Management Assist Legal Officer Training, Houston, Texas (April 29, 2004)
- *The Environmental Law Update for Corporate Counsel - Compliance, Risk Management & Communications Strategies to Achieve Bottom Line Results*
  Co-chair, NorthStar Conferences, Dallas, Texas (January 23 and 24, 2003)

Conservation Easements and Mitigation Banks – "*Feed the Birds*"
22nd Annual Texas Environmental Superconference
John Dugdale, Gordon & Rees LLP
August 6, 2010

Background:

A conservation easement is a voluntary restriction on the beneficial use of a property a landowner places in the hands of a "holder," a third-party, the intent for which is to product a property's ecological/biological, cultural, or vegetative/geological features, among other attributes. Like any deed restriction, a conservation easement runs with the land and therefore diminishes the bundle of rights inherent to a property, although the landowner does retain legal title to the property in question.

Conservation easements are one of the most popular conservation tools employed by the more than 1,260 land trusts in the United States. According to The Nature Conservancy, as of 2000, local and regional land trusts in the United States had protected nearly 2.6 million acres through conservation easements, which represents an almost fivefold in acres protected increase since 1990.

Synopsis of Conservation Easement Principles/Aspects:

Requirements for Easement Holders/Example of Easement Donor's Reservation of Rights

The holder of a conservation easement, which party has the legal authority to enforce the terms of an easement against the landowner, must be a governmental entity or a qualified conservation organization, *i.e.*, and organization with *bona fide* 501(c)(3) standing under the Internal Revenue Code. Because the granting of an easement is entirely voluntary, so long as it is consistent with the conservation values of the property in question, a landowner can retain for itself certain rights, while limiting or restricting future owners or third parties from exercising such rights.

An example of this concept is where a landowner/easement grantor prohibits any residential development on a subject property but reserves for itself the conditional right to construct and maintain a residence or residences on the property. Essentially, so long as the conditioned use the landowner/grantor reserves is consistent with the purpose of the easement and does not impact the resource the easement protects, such a reserved right is permissible.

Means of Enforcement of Terms/Requirements of a Conservation Easement

The most common and practical means of ensuring that the holder of a conservation easement complies with the terms of the easement is to perform and document physical inspections of the property in question. Annual inspections appear to be a generally-acceptable frequency for such inspections, although the interval and time of year or season in which to conduct compliance inspections should take into account such things as breeding or growing season of sensitive animal or plant populations that could be harmed by the conduct of permitted, but circumscribed, activities.

Can a Conservation Easement be Changed or Revoked

As a general principle, and due to the fact that a conservation easement that qualifies as a charitable gift under IRS regulations is designed to be permanent, a conservation easement constitutes an irrevocable encumbrance on title. However, a conservation easement can be amended if both the easement holder and the landowner agree to the terms of the change and if the IRS-recognized "conservation purpose" of the conservation easement is not affected by the amendment.

Tax Benefits of Granting a Conservation Easement as a Charitable Donation – DISCLAIMER: The following discussion does not constitute legal advice on any aspect of taxation

In order for a conservation easement to qualify under IRS regulations as a charitable donation, it must a) serve a *bona fide* and recognized "conservation purpose," b) must be permanent and run with the land, and c), must be donated to a qualified 501(c)(3) charitable or governmental organization. permanent and run with the land.

Both Federal (26 U.S.C. § 170(h)[1]) and Texas (Chapter 183, TX Natural Resource Code[2]) law treat for tax purposes as charitable donations the granting of qualifying conservation easements, typically where the conservation easement:

1. is granted in perpetuity;
2. is granted to a qualified organization that is either:
    a. a nonprofit 501(c)(3) charitable organization (*i.e.*, a land trust) with a conservation purpose and the means to enforce the easement, or
    b. a local, state or federal public agency; and
3. provides at least one of the following public benefits:
    a. the preservation of land for public outdoor recreational or educational purposes;
    b. the protection of natural or manmade habitats of plant, animal, or insect resources;
    c. the preservation of open space, which includes farms, ranches or forests, either for scenic enjoyment or in keeping with a clearly delineated public policy (such as a local open space plan); or

d. the preservation of historically important land or certified historic structures.

For a conservation easement donation to qualify for a federal income tax deduction, the following items usually need to be prepared:

1. the conservation easement document;
2. an inventory (including photographs) of the property's condition at the time of
3. donation listing man-made structures, water resources, agricultural and ecological features;
4. a qualified appraisal of the conservation easement prepared by an independent real estate appraiser working for the donor, completed no more than 60 days prior to the donation and no later than the time the tax return claiming the deduction is filed;
5. a title report, copy of the deed and copies of any mortgages with subordination;
6. agreements from the mortgage holder;
7. a legal land survey; and
8. IRS Form 8283 (an attachment to the federal income tax return of anyone claiming charitable contributions of more than $5,000).

However, it is important to note that where the donation of a conservation easement is not entirely voluntary, such as when the donation of an easement is a component as a supplemental environmental project ("SEP) of the settlement of an environmental enforcement case, it will not qualify as a tax-deductible charitable donation.

A somewhat related issue is where the granting of a conservation easement is occurs in order to satisfy a requirement of a permit – a simple example is where a property owner grants an easement on a portion of a property she or he has developed, and for which development a wetlands permit had to be secured, and a condition of the permit was to create an easement as a mitigation tool. In that instance, the amount of the tax basis of the charitable donation will be reduced by the value of the benefit.

A final tax-related consideration that is of significance to properties in Texas arises where mineral rights are potentially in play. The question of what impact the reservation of mineral rights may have on an the tax treatment of a property subject to a conservation easement is very complex, and would require the consultation of taxation specialists. The scenario here is where a landowner does not own the mineral estate of a property on which it provides a conservation. The easement donor, who does not own the mineral rights, may be able to receive a tax benefit under two scenarios: If the mineral right owner waives its rights to its access rights to the surface necessary for any mineral extraction activities; or, if the surface owner can prove, typically by the presentation of a credible report from a qualified geologist that establishes the potential for mineral development is "so remote as to be negligible." *See* 26 USC § 170(h)(5)(B)(ii)(A).

I have attached 2 conservation easement exemplars/templates for your consideration: Attachment A is the template the U.S. Army Corps of Engineers, Ft. Worth District, has developed for conservation easements that relate to mitigation banks, and Attachment B is the conservation easement template the Land Trust Alliance has developed to serve as guidance for the preparation of conservation easements.

Mitigation Banks/Means to Purchase Conservation Easements

A wetlands mitigation bank serves to mitigate the lawful destruction of jurisdictional wetlands[3] that is a consequence of the development activities authorized by permits issued pursuant to Clean Water Act Section 404, 33 U.S.C. § 1344. As a general rule, such permits will include conditions that require the permittee to create, restore, or enhance wetland habitats as compensation for the permitted activities that will cause unavoidable losses of the wetlands in question. In many instances the nature of the permitted project and the land in question will not allow for economical on-site mitigation, and so mitigation banking provides a cost-effective means for a project to meet the mitigation requirements of a wetlands dredge-and-fill permit - depending on the wetland type or quality, the acreage replacement/restoration/enhancement ratio could range from 1:1 to as much as 1:5. Mitigation is typically performed prior to the wetland impacts, and must occur within one year of wetland impacts, therefore reducing or eliminating temporal loss of wetland functions.

A mitigation bank is created when an unrelated third party has restored, established, enhanced or preserved an unrelated wetland and who then sets that wetland property aside to provide credits that are intended to compensate for future conversions of other physically unrelated wetlands for development activities. While most mitigation banks are designed to compensate for impacts to various wetland types (*e.g.,* tidal saltmarshes, hardwood bottomlands, peat bogs, etc.) some banks have been developed to compensate specifically for impacts to streams.
The most common purpose for mitigation banks is to provide a readily-available market for such credits that are purchased in lieu of funding and retaining all future obligations associated with the mitigation (typically in the form of replacement) of wetlands that are destroyed as a consequence of the development activities of parties authorized pursuant to Clean Water Act Section 404, which activities will result in the loss of jurisdictional wetlands.

Wetlands mitigation banking is a form of "third-party" compensatory mitigation, in which the responsibility for compensatory mitigation implementation and success is assumed by a party other than the permittee. This transfer of liability has been a very attractive feature for Section 404 permit-holders, who would otherwise be responsible for the design, construction, monitoring, ecological success, and long-term protection of the impacted wetland property. Such permittees, with the approval of the agency that issued that permit, can purchase credits from a mitigation bank to meet their requirements for

compensatory mitigation. The value of these "credits" is determined by quantifying the wetland functions or acres restored or created. The bank sponsor is ultimately responsible for the success of the project. Mitigation banking is performed "off-site," meaning it is at a location not on or immediately adjacent to the site of impacts, but within the same watershed.

Federal regulations establish a flexible preference for using credits from a mitigation bank over the other compensation mechanisms. *See* EPA Mitigation Banking Fact Sheet, http://www.epa.gov/owow/wetlands/facts/fact16.html#one, and the Notice, Federal Guidance for the Establishment, Use and Operation of Mitigation Banks, 60 FR 58605 - 58614, November 28, 1995, http://www.epa.gov/owow/wetlands/guidance/mitbankn.html.

Before a bank can be permitted and approved for wetland credit sales, Federal and state government regulatory agencies form a Mitigation Banking Review Team ("MBRT") that must approve plans for building the bank, from the hydrological and planting design to maintenance and monitoring arrangements. The MBRT also approves the number of mitigation credits that may be earned by the Banker.

Mitigation bankers assume total responsibility for the proper conduct of the mitigation and guarantee perpetual maintenance of the bank's environmental assets, and therefore is responsible for monitoring the mitigation bank in accordance with monitoring provisions and reporting identified in the banking instrument to determine the level of success and identify problems requiring remedial action. The period for monitoring will typically be five years, although it may be necessary to extend this period for projects whose mitigation elements require more than 5 years to achieve fruition, such as the successful creation of a forested wetlands or the achievement of remedial goals. The mitigation banker then must submit annual monitoring reports to the agency that issued the permit in question as well as the other members of the MBRT.

Mitigation banking has a number of advantages over traditional permittee-responsible compensatory mitigation because of the ability of mitigation banking programs to:

- Reduce uncertainty over whether the compensatory mitigation will be successful in offsetting project impacts;

- Assemble and apply extensive financial resources, planning, and scientific expertise not always available to many permittee-responsible compensatory mitigation proposals;

- Reduce permit processing times and provide more cost-effective compensatory mitigation opportunities; and

- Enable the efficient use of limited agency resources in the review and compliance monitoring of compensatory mitigation projects because of consolidation.

Thus, mitigation banking advances the statutory goals of the Clean Water Act Section 404 program and its "no net loss" policy goal while providing parties with a simple commercial transaction that ensures compliance with the Clean Water Act: A mitigation banker's sale of wetland credits to a permittee legally transfers the liability for mitigation from the permittee to the wetland banker, who in turn assures the long-term maintenance of the wetland.

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[1] 26 USC § 170(h) - Qualified Conservation Contribution
(1) In general
For purposes of subsection (f)(3)(B)(iii), the term "qualified conservation contribution" means a contribution—
(A) of a qualified real property interest,
(B) to a qualified organization,
(C) exclusively for conservation purposes.
(2) Qualified real property interest
For purposes of this subsection, the term "qualified real property interest" means any of the following interests in real property:
(A) the entire interest of the donor other than a qualified mineral interest,
(B) a remainder interest, and
(C) a restriction (granted in perpetuity) on the use which may be made of the real property.
(3) Qualified organization
For purposes of paragraph (1), the term "qualified organization" means an organization which—
(A) is described in clause (v) or (vi) of subsection (b)(1)(A), or
(B) is described in section 501 (c)(3) and—
(i) meets the requirements of section 509 (a)(2), or
(ii) meets the requirements of section 509 (a)(3) and is controlled by an organization described in subparagraph (A) or in clause (i) of this subparagraph.
(4) Conservation purpose defined
(A) In general
For purposes of this subsection, the term "conservation purpose" means—
(i) the preservation of land areas for outdoor recreation by, or the education of, the general public,
(ii) the protection of a relatively natural habitat of fish, wildlife, or plants, or similar ecosystem,
(iii) the preservation of open space (including farmland and forest land) where such preservation is—
(I) for the scenic enjoyment of the general public, or
(II) pursuant to a clearly delineated Federal, State, or local governmental conservation policy,
and will yield a significant public benefit, or
(iv) the preservation of an historically important land area or a certified historic structure.
(B) Certified historic structure
For purposes of subparagraph (A)(iv), the term "certified historic structure" means any building, structure, or land area which—
(i) is listed in the National Register, or
(ii) is located in a registered historic district (as defined in section 47(c)(3)(B)) and is certified by the Secretary of the Interior to the Secretary as being of historic significance to the district.
A building, structure, or land area satisfies the preceding sentence if it satisfies such sentence either at the time of the transfer or on the due date (including extensions) for filing the transferor's return under this chapter for the taxable year in which the transfer is made.
(5) Exclusively for conservation purposes

For purposes of this subsection—
(A) Conservation purpose must be protected
A contribution shall not be treated as exclusively for conservation purposes unless the conservation purpose is protected in perpetuity.
(B) No surface mining permitted
(i) In general Except as provided in clause (ii), in the case of a contribution of any interest where there is a retention of a qualified mineral interest, subparagraph (A) shall not be treated as met if at any time there may be extraction or removal of minerals by any surface mining method.
(ii) Special rule With respect to any contribution of property in which the ownership of the surface estate and mineral interests has been and remains separated, subparagraph (A) shall be treated as met if the probability of surface mining occurring on such property is so remote as to be negligible.
(6) Qualified mineral interest
For purposes of this subsection, the term "qualified mineral interest" means—
(A) subsurface oil, gas, or other minerals, and
(B) the right to access to such minerals.

[2] NATURAL RESOURCES CODE, TITLE 8. ACQUISITION OF RESOURCES, CHAPTER 183. CONSERVATION EASEMENTS

SUBCHAPTER A. CONSERVATION EASEMENTS GENERALLY

§ 183.001. DEFINITIONS. In this chapter: (1) "Conservation easement" means a nonpossessory interest of a holder in real property that imposes limitations or affirmative obligations designed to: (A) retain or protect natural, scenic, or open-space values of real property or assure its availability for agricultural, forest, recreational, or open-space use; (B) protect natural resources; (C) maintain or enhance air or water quality; or (D) preserve the historical, architectural, archeological, or cultural aspects of real property. (2) "Holder" means: (A) a governmental body empowered to hold an interest in real property under the laws of this state or the United States; or (B) a charitable corporation, charitable association, or charitable trust created or empowered to: (i) retain or protect the natural, scenic, or open-space values of real property; (ii) assure the availability of real property for agricultural, forest, recreational, or open-space use; (iii) protect natural resources; (iv) maintain or enhance air or water quality; or (v) preserve the historical, architectural, archeological, or cultural aspects of real property. (3) "Third-party right of enforcement" means a right provided in a conservation easement to enforce any of its terms granted to a governmental body, charitable corporation, charitable association, or charitable trust that is eligible to be a holder but is not a holder. (4) "Servient estate" means the real property burdened by the conservation easement. Added by Acts 1983, 68th Leg., p. 2438, ch. 434, § 1, eff. Sept. 1, 1983.

§ 183.002. CREATION, CONVEYANCES, ACCEPTANCES, AND DURATION. (a) Except as otherwise provided in this chapter, a conservation easement may be created, conveyed, recorded, assigned, released, modified, terminated, or otherwise altered or affected in the same manner as other easements. (b) A right or duty in favor of or against a holder and a right in favor of a person having a third-party right of enforcement does not arise under a conservation easement before its acceptance by the holder and the recordation of the acceptance. (c) Except as provided by Section 183.003(b) of this code, a conservation easement is unlimited in duration unless the instrument creating it makes some other provision. (d) An interest that exists in real property at the time a conservation easement is created is not impaired unless the owner of the interest is a party to the conservation easement or consents to it. (e) A conservation easement must be created in writing, acknowledged and recorded in the deed records of the county in which the servient estate is located, and must include a legal description of the real property which constitutes the servient estate. (f) If land that has been subject to a conservation easement is no longer subject to such easement, an additional tax is imposed on the land equal to the difference, if any, between the taxes imposed on the land for each of the five years preceding the year in which the easement terminates and the taxes that would have been imposed had the land not been subject to a conservation easement in each of those years, plus interest at an annual rate of seven percent calculated from the dates on which the differences would have become due. Added by Acts 1983, 68th Leg., p. 2438, ch. 434, § 1, eff. Sept. 1, 1983.

§ 183.003. JUDICIAL ACTIONS. (a) An action affecting a conservation easement may be brought by: (1) an owner of an interest in the real property burdened by the easement; (2) a holder of the easement; (3) a person having a third-party right of enforcement; or (4) a person authorized by some other law. (b) This chapter does not affect the power of a court to modify or terminate a conservation easement in accordance with the principles of law and equity. Added by Acts 1983, 68th Leg., p. 2438, ch. 434, § 1, eff. Sept. 1, 1983.

§ 183.004. VALIDITY. A conservation easement is valid even though: (1) it is not appurtenant to an interest in real property; (2) it can be or has been assigned to another holder; (3) it is not of a character that has been recognized traditionally at common law; (4) it imposes a negative burden; (5) it imposes affirmative obligations on the owner of an interest in the burdened property or on the holder; (6) the benefit does not touch or concern real property; or (7) there is no privity of estate or of contract. Added by Acts 1983, 68th Leg., p. 2438, ch. 434, § 1, eff. Sept. 1, 1983.

§ 183.005. APPLICABILITY. (a) This chapter applies to any interest created on or after September 1, 1983, that complies with this chapter, whether designated as a conservation easement or as a covenant, equitable servitude, restriction, easement, or otherwise. (b) This chapter applies to any interest created before September 1, 1983, if it would have been enforceable had it been created on or after September 1, 1983, unless retroactive application contravenes the constitution or laws of this state or the United States. (c) This chapter does not invalidate any interest, whether designated as a conservation or preservation easement or as a covenant, equitable servitude, restriction, easement, or otherwise, that is enforceable under other law of this state. Added by Acts 1983, 68th Leg., p. 2438, ch. 434, § 1, eff. Sept. 1, 1983.

SUBCHAPTER B. TEXAS FARM AND RANCH LANDS CONSERVATION PROGRAM

§ 183.051. PURPOSE. The purpose of the program established under this subchapter is to enable and facilitate the purchase and donation of agricultural conservation easements. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.052. DEFINITIONS. In this subchapter: (1) "Agricultural conservation easement" means a conservation easement in qualified land that is designed to accomplish one or more of the following additional purposes: (A) conserving water quality or quantity; (B) conserving native wildlife species through protection of their habitat; (C) conserving rare or sensitive plant species; or (D) conserving large tracts of qualified open-space land that are threatened with fragmentation or development. (2) "Commissioner" means the commissioner of the General Land Office. (3) "Council" means the Texas Farm and Ranch Lands Conservation Council established under Section 183.061. (4) "Fund" means the Texas farm and ranch lands conservation fund established under Section 183.058. (5) "Land office" means the General Land Office. (6) "Program" means the Texas farm and ranch lands conservation program established under this subchapter. (7) "Purchase of agricultural conservation easement" means the purchase from a willing seller of an agricultural conservation easement. (8) "Qualified easement holder" means a holder that is: (A) a state agency or a municipality; or (B) an organization that is exempt from federal income taxation under Section 501(a), Internal Revenue Code of 1986, as an organization described by Section 501(c)(3) of that code and that is organized for the purpose of preserving agriculture, open space, or natural resources. (9) "Qualified land" means qualified open-space land, as that term is defined by Section 23.51, Tax Code. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.053. PROGRAM. The Texas farm and ranch lands conservation program is established as a program of the land office for the purpose of administering the assistance to be provided by the fund for the purchase of agricultural conservation easements. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.054. TERMS OF AGRICULTURAL CONSERVATION EASEMENT. (a) An agricultural conservation easement under this subchapter must be perpetual or for a term of 30 years. (b) The owner of qualified land and a potential purchaser of an agricultural conservation easement should consider and negotiate easement terms, including the following considerations: (1) whether the landowner will receive a lump sum or annual payments; (2) whether the term of the easement shall be perpetual or for a term of 30 years; (3) whether a term easement is renewable; (4) whether the landowner retains limited development

rights; and (5) the purchase price of the easement. (c) An agricultural conservation easement may not be assigned to or enforced by a third party without the express written consent of the landowner. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.055. TERMINATION OF EASEMENT. (a) Any time after an agricultural conservation easement is acquired with a grant awarded under this subchapter, the landowner may request that the council terminate the easement as provided by Subsection (b) on the ground that the landowner is unable to meet the conservation goals as described by Section 183.052(1). The termination request must contain a verifiable statement of impossibility. (b) On receipt of the request for termination, the council shall notify the qualified easement holder and conduct an inquiry. Not later than the 180th day after the date the council receives the request, the council shall notify the parties of the decision to grant or deny the request for termination. Either party may appeal the decision in district court not later than the 45th day after the date of the notification. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.056. REPURCHASE BY LANDOWNER. (a) In this section: (1) "Agricultural value" means the price as of the appraisal date a buyer willing, but not obligated, to buy would pay for a farm or ranch unit with land comparable in quality and composition to the subject property, but located in the nearest location where profitable farming or ranching is feasible. (2) "Fair market value" means the price as of the appraisal date that a buyer willing, but not obligated, to buy would pay for the land at its best and most beneficial use under any obtainable development zoning category. (b) If a request for termination of an agricultural conservation easement is granted under Section 183.055, the commissioner shall order an appraisal of the fair market value and the agricultural value of the property subject to the easement. The landowner shall bear the cost of the appraisal. (c) Not later than the 180th day after the date of the appraisal under Subsection (b), the landowner must pay to the qualified easement holder an amount equal to the difference between the fair market value and the agricultural value. The qualified easement holder shall pay to the fund any amounts received under this subsection, not to exceed the amount paid by the fund for purchase of the easement. (d) Not later than the 30th day after the date of payment by the landowner under Subsection (c), the qualified easement holder shall terminate the easement. (e) If the request for termination is denied or if the landowner fails to make the payment required by Subsection (c) in the time required by that subsection, the landowner may not submit another request for termination of the easement before the fifth anniversary of the date of the last request. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.057. PROTECTED LAND; NOTICE OF TAKING. (a) A department or agency of this state, a county, a municipality, another political subdivision, or a public utility may not approve any program or project that requires the use or taking through eminent domain of private land encumbered by an agricultural conservation easement purchased under this subchapter unless the governmental entity or public utility acting through its governing body or officers determines that: (1) there is no feasible and prudent alternative to the use or taking of the land; and (2) the program or project includes all reasonable planning to minimize harm to the land resulting from the use or taking. (b) A determination required by Subsection (a) may be made only at a properly noticed public hearing. (c) The governing body or officers of the governmental entity or public utility may consider clearly enunciated local preferences, and the provisions of this subchapter do not constitute a mandatory prohibition against the use of the area if the determinations required by Subsection (a) are made. (d) If, after making the determination required by Subsection (a), a department or agency of this state, a county, a municipality, another political subdivision, or a public utility acquires by eminent domain a fee simple interest in land encumbered by an agricultural conservation easement purchased under this subchapter: (1) the easement on the condemned property terminates; and (2) the entity exercising the power of eminent domain shall: (A) pay for an appraisal of the fair market value, as that term is defined by Section 183.056, of the property subject to condemnation; (B) pay to the qualified easement holder an amount equal to the amount paid by the holder for the portion of the easement affecting the property to be condemned; (C) pay to the landowner an amount equal to the fair market value of the condemned property less the amount paid to the qualified easement holder under Paragraph (B); and (D) pay to the landowner and the qualified easement holder any additional damages to their interests in the remaining property, as determined by the special commissioners under Section 21.042, Property Code. (e) If, after making the determination required by Subsection (a), a department or agency of

this state, a county, a municipality, another political subdivision, or a public utility acquires by eminent domain an interest other than a fee simple interest in land encumbered by an agricultural conservation easement purchased under this subchapter: (1) the entity exercising the power of eminent domain shall pay for an appraisal of the fair market value, as that term is defined by Section 183.056, of the property subject to condemnation; and (2) the special commissioners shall consider the fair market value as the value of the property for purposes of assessing damages under Section 21.042, Property Code. (f) The qualified easement holder shall pay to the fund any amounts received under Subsections (d) and (e), not to exceed the amount paid by the fund for the purchase of the easement. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.058. TEXAS FARM AND RANCH LANDS CONSERVATION FUND. (a) The Texas farm and ranch lands conservation fund is an account in the general revenue fund that may be appropriated only to the land office to be used as provided by Subsection (b). The fund may not be used for grants to purchase or acquire any right or interest in property by eminent domain. The fund consists of: (1) money appropriated by the legislature to the fund; (2) public or private grants, gifts, donations, or contributions; and (3) funds from any other source, including proceeds from the sale of bonds, state or federal mitigation funds, or funds from any local, state, or federal program. (b) The fund may be used only: (1) to award grants to qualified easement holders for the purchase of agricultural conservation easements; (2) to pay transaction costs related to the purchase of agricultural conservation easements, which may include reimbursement of appraisal costs; and (3) to pay associated administrative costs of the land office, not to exceed five percent of the money in the fund. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.059. ADMINISTRATION OF FUND. (a) The council may: (1) adopt rules necessary to perform program duties under this subchapter; (2) request, accept, and use gifts, loans, donations, aid, appropriations, guaranties, subsidies, grants, or contributions of any item of value for the furtherance of any purposes of this subchapter; (3) establish, charge, and collect fees, charges, and penalties in connection with the programs, services, and activities provided for by this subchapter; (4) make, enter into, and enforce contracts and agreements, and take other actions as may accomplish any of the purposes of this subchapter; (5) seek ways to coordinate and leverage public and private sources of funding; (6) adopt best practices and enforcement standards for the evaluation of easements purchased through grants from the fund; (7) establish a protocol for the purchase of agricultural conservation easements and for the distribution of funds to approved applicants; (8) administer grants awarded to successful applicants; (9) ensure that agricultural conservation easements purchased under this subchapter are not inconsistent with the preservation of open space and the conservation of wildlife habitat or water; and (10) approve the termination of easements and take any other action necessary to further the goals of the program. (b) To receive a grant from the fund under this subchapter, an applicant who is qualified to be an easement holder under this subchapter must submit an application to the council. The application must: (1) set out the parties' clear conservation goals consistent with the program; (2) include a site-specific estimate-of-value appraisal by a licensed appraiser qualified to determine the market value of the easement; (3) demonstrate that the applicant is able to match 50 percent of the amount of the grant being sought, considering that the council may choose to allow a donation of part of the appraised value of the easement to be considered as in-kind matching funds; and (4) include a memorandum of understanding signed by the landowner and the applicant indicating intent to sell an agricultural conservation easement and containing the terms of the contract for the sale of the easement. (c) For the purposes of determining the amount of a grant under this subchapter, the value of an agricultural conservation easement shall be determined by a site-specific estimate-of-value appraisal performed by a licensed, qualified appraiser. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.060. CRITERIA FOR AWARDING GRANTS. The council shall adopt a scoring process to be used in evaluating applications that considers the following: (1) maintenance of landscape and watershed integrity to conserve water and natural resources; (2) protection of highly productive agricultural lands; (3) protection of habitats for native plant and animal species, including habitats for endangered, threatened, rare, or sensitive species; (4) susceptibility of the subject property to subdivision, fragmentation, or other development; (5) potential for leveraging state money allocated to the program with additional public or

private money; (6) proximity of the subject property to other protected lands; (7) the term of the proposed easement, whether perpetual or for a term of 30 years; and (8) a resource management plan agreed to by both parties and approved by the council. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.061. TEXAS FARM AND RANCH LANDS CONSERVATION COUNCIL. (a) The Texas Farm and Ranch Lands Conservation Council is established to advise and assist the commissioner with administration of the program and to select applicants to receive grants under this subchapter using the criteria adopted by the council under Section 183.060. The council consists of: (1) six members appointed by the governor as follows: (A) one member who operates a family farm or ranch in this state; (B) one member who is the designated representative of an agricultural banking or lending organization and who has significant experience lending for farms and ranches or lands encumbered by conservation easements; (C) two members who are the designated representatives of a statewide agricultural organization in existence in this state for not less than 10 years; (D) one member who is a designated representative of a statewide nonprofit organization that represents land trusts operating in this state; and (E) one member from a state institution of higher education who has significant experience with natural resources issues; and (2) four ex officio members as follows: (A) the commissioner; (B) the commissioner of agriculture or the commissioner's designee; (C) the presiding officer of the Parks and Wildlife Commission or the presiding officer's designee; and (D) the state conservationist of the Natural Resources Conservation Service of the United States Department of Agriculture or a designee of that person, who serves as a nonvoting member. (b) Appointed members of the council serve staggered terms of six years, with two of the members' terms expiring February 1 of each odd-numbered year. (c) Appointments to and removal from the council shall be made by the governor without regard to the race, color, disability, sex, religion, age, or national origin of the appointees. (d) The commissioner or the commissioner's designee shall serve as the presiding officer of the council and shall designate from among the members of the council an assistant presiding officer to serve in that capacity at the will of the commissioner. The council may choose from its members other officers as the council considers necessary. (e) A member of the council is not entitled to compensation for service on the council but is entitled to reimbursement of the necessary and reasonable travel expenses incurred by the member while conducting the business of the council, as provided for state employees by the General Appropriations Act. (f) The council shall meet not less than once each year. (g) A person may not be appointed as a council member if the person or the person's spouse: (1) is employed by or participates in the management of a business entity or other organization receiving money under the program; (2) owns or controls, directly or indirectly, more than a 10 percent interest in a business entity or other organization receiving money under the program; or (3) uses or receives a substantial amount of tangible goods, services, or money under the program other than reimbursement authorized by law for travel expenses as described by Subsection (e). (h) In this subsection, "Texas trade association" means a cooperative and voluntarily joined statewide association of business or professional competitors in this state designed to assist its members and its industry or profession in dealing with mutual business or professional problems and in promoting their common interest. A person may not be an appointed member of the council if: (1) the person is an officer, employee, or paid consultant of a Texas trade association for an occupation or profession with an interest in land conservation that is related to the occupation or profession; or (2) the person's spouse is an officer, manager, or paid consultant of a Texas trade association for an occupation or profession with an interest in land conservation that is related to that occupation or profession. (i) A person may not be an appointed member of the council or act as the general counsel to the council if the person is required to register as a lobbyist under Chapter 305, Government Code, because of the person's activities for compensation on behalf of an occupation or profession with an interest in land conservation that is related to that occupation or profession. (j) It is a ground for removal from the council if a member: (1) is ineligible for membership under this section; (2) cannot, because of illness or disability, discharge the member's duties for a substantial part of the member's term; or (3) is absent from more than half of the regularly scheduled council meetings that the member is eligible to attend during a calendar year without an excuse approved by a majority vote of the council. (k) The validity of an action of the council is not affected by the fact that it is taken when a ground for removal of a participating council member exists. (l) If the presiding officer has knowledge that a potential ground for removal exists, the presiding officer shall notify the commissioner and the governor that a potential ground for removal exists. (m) The

presiding officer or the presiding officer's designee, with the assistance of staff of the land office, shall provide to members of the council information regarding a member's responsibilities under applicable laws relating to standards of conduct for state officers. (n) A person who is appointed to and qualifies for office as a member of the council may not vote, deliberate, or be counted as a member in attendance at a meeting of the council until the person completes a training program that complies with this section. The training program must provide the person with information regarding: (1) the legislation that created the council; (2) the program to be administered under this subchapter; (3) the role and functions of the council; (4) the rules of the council, with an emphasis on the rules that relate to disciplinary and investigatory authority; (5) the current budget for the council; (6) the results of the most recent formal audit of the council; (7) the requirements of: (A) the open meetings law, Chapter 551, Government Code; (B) the public information law, Chapter 552, Government Code; (C) the administrative procedure law, Chapter 2001, Government Code; and (D) other laws relating to public officials, including conflict-of-interest laws; and (8) any applicable policies adopted by the council or the Texas Ethics Commission. (o) A person appointed to the council is entitled to reimbursement, as provided by the General Appropriations Act, for the travel expenses incurred in attending the training program regardless of whether the attendance at the training program occurs before or after the person qualifies for office. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

§ 183.062. EFFECT ON TAX APPRAISAL. An agricultural conservation easement under this subchapter does not affect the eligibility of the property subject to the easement for appraisal for ad valorem tax purposes under Subchapter D, Chapter 23, Tax Code. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005. § 183.063. REPORT TO TEXAS DEPARTMENT OF TRANSPORTATION. Not later than the 10th day after the date of a closing of a purchase of an easement under this subchapter, the land office shall provide the Texas Department of Transportation a legal description of the property subject to the easement and shall include with the description the date the closing occurred. Added by Acts 2005, 79th Leg., ch. 1354, § 2, eff. Sept. 1, 2005.

[3] The applicable definition of a "wetland" is found at 33 CFR § 238.3(b) reads: The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

EXHIBIT A

{THIS CONSERVATION EASEMENT AGREEMENT TEMPLATE IS SUGGESTED FOR USE WHERE AN EASEMENT IS BEING INCORPORATED TO COMPENSATE FOR PROJECT-RELATED IMPACTS REQUIRING COMPENSATORY MITIGATION. ANY PROJECT-SPECIFIC CHANGES, ADDITIONS, OR DELETIONS TO THIS AGREEMENT MUST BE APPROVED BY THE UNITED STATES ARMY CORPS OF ENGINEERS. CHANGES MAY SUBSTANTIALLY ADD TO OVERALL PROJECT REVIEW TIME, DELAYING PERMIT ISSUANCE.}

CONSERVATION EASEMENT

STATE OF TEXAS §
§
COUNTY OF {*ENTER NAME (S) OF COUNTY (IES) WHERE EASEMENT IS LOCATED AND AGREEMENT WILL BE FILED*}

DATE: {*ENTER DATE*}

GRANTOR: {*ENTER NAME AND ADDRESS*}

GRANTEE: {*ENTER NAME AND ADDRESS*}

THIRD PARTY: {*ENTER NAME AND ADDRESS OF EACH THIRD PARTY CONTRACT PARTICIPANT*}

This Grant of CONSERVATION EASEMENT ("Conservation Easement") is made on this {*ENTER DAY*} of {*ENTER MONTH*}, {*ENTER YEAR*}, by {*ENTER NAME OF GRANTOR*} ("Grantor"), with an address of {*ENTER ADDRESS OF GRANTOR*}, in favor of {*ENTER NAME OF GRANTEE*} ("Grantee"), with an address of {*ENTER ADDRESS OF GRANTEE*}; and {*ENTER NAME OF EACH THIRD PARTY CONTRACT PARTICIPANT* } ("Third Party"), with an address of {*ENTER ADDRESS OF EACH THIRD PARTY CONTRACT PARTICIPANT* }.

RECITALS:

A. Grantor is the sole owner in fee simple of certain real property (Property) consisting of {*ENTER NUMBER OF ACRES*} located and situated in {*ENTER NAME OF COUNTY*}, Texas and legally described in **Exhibit A** (Property) attached hereto and incorporated by this reference.

B. Grantee is qualified to hold the Conservation Easement and is either:

(a) a governmental body empowered to hold an interest in real property under the laws of this State or the United States; or

(b) a charitable, not-for-profit or educational corporation, association, or trust, as defined under the Texas Natural Resources Code, Section 183.001, et seq. and Section 170(h) of the Internal Revenue Code Section 501(c)(3), as amended, the

purposes or powers of which include one or more of the Purpose(s) described below.

{*THIS SECTION IS MITIGATION BANK PROJECT-SPECIFIC: ADD AS NECESSARY*} The Grantee protects natural habitats of fish, wildlife, plants, and the ecosystems that support them. The Grantee also preserves open spaces, including ranches, farms, and forests, where such preservation is for scenic enjoyment of the general public or pursuant to clearly delineated governmental conservation policies and where it will yield a significant public benefit.

C. The purpose of the Conservation Easement includes but is not limited to one or more of the following Purposes (Purposes): {*PURPOSES OPTION: ADD SPECIFIC PURPOSES AS NECESSARY. DO NOT DELETE PURPOSES CURRENTLY LISTED.*}

(a) retaining or protecting natural, scenic, or open-space aspects of the Property;

(b) ensuring the availability of the Property for recreational, educational, or open-space use;

(c) protecting natural resources;

(d) maintaining or enhancing air and water quality;

(e) preserving the historical, architectural, archaeological, or cultural aspects of the Property.

(f) {*MITIGATION BANK PROJECT-SPECIFIC: ADD AS NECESSARY.*} to serve as a mitigation bank pursuant to the regulation and guidelines of the United States Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (USACE) promulgated under authority of Section 404 of the Clean Water Act (33 USC § 1344, et seq.) and Section 10 of the Rivers and Harbors Act of 1899 (33 USC § 403, et seq.). Any uses of the Property that may impair or interfere with these Purposes of the Conservation Easement are expressly prohibited.

D. The preservation of the Property is a condition of the Department of the Army Section 404 Permit Number {*ENTER PERMIT NUMBER*}, dated {*ENTER DATE OF PERMIT APPROVAL*} or a revision thereof (Permit), and attached hereto as **Exhibit B**. The Permit requires certain restrictions to be placed on the Property in order to provide compensation for unavoidable adverse impacts to waters of the United States. It is the intent of this Agreement and the Conservation Easement granted herein to assure that the Property will be retained and maintained forever in the vegetative and hydrologic condition described in the success criteria of the Mitigation Plan. Any activities not included in the Permit that may be conducted on the Property and that will affect the vegetative and hydrologic conditions outlined in the success criteria of the Mitigation Plan, must be approved by the United States Army Corps of Engineers (USACE), Fort Worth District, Regulatory Branch, prior to initiation. The Conservation Easement granted by this Agreement is created pursuant to the Texas Uniform Conservation Easement Act of 1983 contained in Chapter 183 of the Texas Natural Resources Code.

E. The following Exhibits are attached to this Conservation Easement and incorporated by reference:

Exhibit A Legal Description of the Property

Exhibit B U.S. Army Corps of Engineers Permit (Including Mitigation Plan)

Exhibit C Mitigation Banking Instrument {*PROJECT-SPECIFIC REQUIREMENT*}

Exhibit D Site Development Plan {*PROJECT-SPECIFIC REQUIREMENT*}

Exhibit E Baseline Documentation Report {*PROJECT-SPECIFIC REQUIREMENT*}

AGREEMENT

THE GRANTOR, GRANTEE, AND THIRD PARTY (IES) AGREE TO THE FOLLOWING:

1.0 PURPOSE AND COMMITMENT

The Grantor conveys and warrants to the Grantee this perpetual and assignable Conservation Easement over the Property in consideration of the facts recited above and of the mutual covenants, terms, conditions, and restrictions contained herein together with all other rights reasonably necessary or desirable to accomplish the objectives of the Mitigation Plan and the rights granted under this Agreement (the Conservation Easement), subject to the following terms, reservations, covenants, limitations, and exceptions:

1.1 The Grantor is the sole (fee simple) owner of the surface interest in the Property. The Grantor is committed to and agrees to confine use of the Property to activities consistent with the Purposes of this Conservation Easement. Grantor warrants that Grantor has good and sufficient title to the surface interest in the Property, free from all encumbrances that may materially and adversely affect the Purposes of the Conservation Easement of the Property as described herein, and hereby promises to defend the same against all claims that may be made against the Property. Grantor will not perform, nor knowingly allow others to perform, any act on or affecting the Property that is inconsistent with the Purposes of this Conservation Easement.

1.2 The Conservation Easement shall be perpetual. The Conservation Easement is an easement in gross, runs with the land, and is enforceable by Grantee against Grantor, and Grantor's successors, assigns, lessees, agents, and licensees. The Conservation Easement assures that the Property will be perpetually preserved in its predominant natural, scenic, forested, undeveloped, and open condition.

1.3 The Grantee is a qualified recipient of the Conservation Easement as defined by the Texas Natural Resources Code, Section 183.001, et seq. and Section 170(h) of the Internal Revenue Code or any successors thereof, and is committed to upholding the terms of this Conservation Easement.

1.4. {*MITIGATION BANK PROJECT-SPECIFIC: ADD THIS SECTION AS NECESSARY*} The Grantor agrees that, other than in connection with a mitigation bank established pursuant to a Mitigation Banking Instrument or other legally binding document executed by owner in furtherance of a mitigation banking program or project authorized under the statues referenced in Recitals Section C (f) or successor statues thereto.

1.4.1 neither the Property nor any portion of it shall be included as part of the gross area of the other property not subject to this Conservation Easement for the purposes of determining density, lot coverage, permissible lot yield, or open space requirement under otherwise applicable laws, regulations, or ordinances controlling land use, and building density; and,

1.4.2 no development rights that have been encumbered or extinguished by this Conservation Easement shall be transferred to any other lands pursuant to a transferable development rights, scheme cluster development arrangement or otherwise.

1.5 {*MITIGATION BANK PROJECT-SPECIFIC: ADD THIS SECTION AS NECESSARY*} The Conservation Easement Values of the Property include the following:

1.5.1 Public Policy. The Property is preserved pursuant to a clearly delineated federal, state, or local conservation policy, and yield a significant public benefit. Legislation, regulations, and policy statements that establish relevant public policy include, but are not limited to:

(i) conservation easements, as stipulated in the Texas Natural Resources Code, § 183.001(1) et seq.; and

(ii) protection of all wild animals as property of the State of Texas as stipulated in the Texas Natural Resources Code, § 1.011 et seq.; and

(iii) conservation of water resources as stipulated in the Texas Water Code, § 16.016 et seq., § 16.053 et seq., § 16.054 et seq., § 26.003 et seq., and 26.012 et seq.

1.5.2 Wildlife Habitat. The Property:

(i) contains significant natural habitat in which fish, wildlife, plants, or the ecosystems that support them, thieve in a relatively natural condition; and

(ii) contains and supports sustainable habitat for a biologically diverse collection of animal and plants; and

(iii) has a significant amount of undeveloped {*MITIGATION BANK PROJECT-SPECIFIC: PROVIDE INFORMATION NECESSARY AS TO ANY DESIGNATED RIVERS OR STREAMS WITHIN THE MITIGATION BANK BOUNDARIES*}; and

(iv) contains natural wetlands areas which provide habitat for {*MITIGATION BANK PROJECT-SPECIFIC: PROVIDE ALL INFORMATION NECESSARY AS TO ANY PRESENCE OF, AQUATIC INVERTEBRATES, REPTILES, AMPHIBIANS, AND AQUATIC AND/OR EMERGENT VEGETATION WITHIN THE MITIGATION BANK BOUNDARIES*}; and

(v) has valued native forestland which exists on the Property, including {*MITIGATION BANK PROJECT-SPECIFIC: PROVIDE ALL INFORMATION NECESSARY AS TO ANY PRESENTENCE OF, NATIVE SPECIES, DIVERSITY OF TREE CLASSES AND STRUCTURE, CANOPY TYPE, AND LEVEL OF TREE DEBRIS WITHIN THE MITIGATION BANK BOUNDARIES*}; and

(vi) contains natural areas that represent {*MITIGATION BANK PROJECT-SPECIFIC: PROVIDE LEVEL OF QUALITY, E.G. HIGH, MEDIUM , LOW WITHIN THE MITIGATION BANK BOUNDARIES*} examples of terrestrial, or aquatic communities; and

(vii) contains a diversity of plant and animal life in an broad range of habitats.

1.5.3 Source Water Protection. The Property includes {*MITIGATION BANK PROJECT-SPECIFIC: IDENTIFY AND PROVIDE INFORMATION NECESSARY AS TO LINEAR FOOTAGE OF DESIGNATED RIVERS OR STREAMS WITHIN THE MITIGATION BANK BOUNDARIES*}.

2.0 PROHIBITED ACTIONS AND PROPERTY USES

2.1 Any activity on, or use of, the Property that is inconsistent with the Purposes of this Conservation Easement is expressly prohibited. The Property shall be preserved in its natural condition and restricted from any development that would impair or interfere with the Purposes of the Conservation Easement Property.

{*MITIGATION BANK PROJECT-SPECIFIC: ADD AS NECESSARY*} Except as provided for in Section 2 for this Conservation Easement, expressly prohibited activities and uses are described in the Mitigation Banking Instrument attached hereto as **Exhibit C**, incorporated herein (Mitigation Banking Instrument) and the Site Development Plan attached as **Exhibit D,** incorporated herein (Site Development Plan). Neither of these documents should be read to limit prohibited activities and uses to those listed in the documents.

2.2 Neither Grantor, its agents, assigns, successors, or personal representatives, nor any purchasers, lessees, or other users of the Property may use, disturb, or allow through intent or negligence, the use or disturbance of the Property in any manner that is inconsistent with the Purposes of the Conservation Easement. Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited, restricted, or reserved as indicated hereunder: {*PROJECT SPECIFIC: GRANTOR, GRANTEE, AND THIRD PARTY (IES) MAY MODIFY ACTIVITIES AS APPROPRIATE, BUT GENERALLY THESE ACTIVITIES SHOULD BE PROHIBITED.*}

{*MITIGATION BANK PROJECT-SPECIFIC: ADD AS NECESSARY*} Grantor and Grantee have determined that the allowed activities may be conducted in a manner that does not permanently impair the Conservation Values in Section 1.5 of the Property.

2.2.1 Subdivision. The Property may not be further divided, subdivided, or partitioned.

2.2.2 Commercial Development. Commercial or industrial use of or activity on the Property is prohibited.

2.2.3 Construction. There shall be no constructing or placing of any building, mobile home, asphalt or concrete pavement, billboard or other advertising display, antenna, utility pole, tower, conduit, line, pier, landing, dock, or any other temporary or permanent structure or facility, or any other man-made structures on the Property except in connection with the repair, maintenance, or replacement (but not expansion) of any structures and other improvements located on the Property as of the Effective Date of this Agreement.

2.2.4 Maintenance of Existing Improvements. Grantor shall have the right to maintain, renovate, and repair existing buildings, structures, fences, pens, wells, dams and reservoirs, utilities, soft-surface roads, and other improvements, and in the event of their destruction, to reconstruct any such existing improvement with another of similar size, function, capacity, location, and material. Maintenance of existing roads shall be limited to removal of dead vegetation, necessary pruning or removal of obstructing trees and plants, and/or application of permeable materials (e.g., sand, gravel, and crushed stone) as necessary to correct or prevent erosion.

2.2.5 Biocides. There shall be no use of pesticides, including but not limited to insecticides, fungicides, rodenticides, and herbicides, except as expressly allowed in the Mitigation Plan and, unless approved in writing by Grantor, Grantee, Third Party (ies), and USACE to control problem animals or invasive species detrimental to the Purpose(s) of the Conservation Easement and the Property.

2.2.6 Disturbance of Natural Habitat. There shall be no removing, destroying, cutting, trimming, mowing, shredding, clearing, altering of any vegetation, or disturbing or changing in any way the natural habitat existing on the Property, except as expressly allowed in the Mitigation Plan {*MITIGATION BANK PROJECT-SPECIFIC: REPLACE* 'MITIGATION PLAN' *WITH* 'MITIGATION BANKING INSTRUMENT'}and in order to fulfill the objectives and standards of that plan. Grantor may remove diseased, invasive or non-native trees, shrubs, or plants; cut and mow firebreaks and existing road rights-of-way; and remove trees, shrubs, or plants to accommodate maintenance of permitted improvements or other uses expressly permitted under the terms of this Conservation Easement. With written approval of Grantee and Third Party (ies), Grantor may remove potentially invasive plants from the Property for habitat management purposes consistent with the intent of this Conservation Easement. Except as necessary for activities expressly permitted in this Conservation Easement and with written permission from Grantee and Third Party (ies), there shall be no farming, tilling, or destruction and removal of native vegetation on the Property.

2.2.7 Dumping. There shall be no dumping or storing of any material, such as trash, wastes, ashes, sewage, garbage, scrap material, sediment discharges, oil and

petroleum by-products, leached compounds, toxic materials or fumes, or any "hazardous substances" (as hereinafter defined). For the purposes of this paragraph, the phrase "hazardous substances" shall be defined as in the federal Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601 et seq.) and/or a substance whose manufacture, processing, distribution in commerce, use, possession, or disposal is banned, prohibited, or limited pursuant to the federal Toxic Substances Control Act (15 U.S.C. 2601 et seq.).

2.2.8 Vehicle Traffic. Off-road use of automobiles, trucks, vans, or other motor vehicles on the Property is prohibited, except as is necessary for inspection, construction, or maintenance of permitted improvements, and fire protection or emergency purposes.

2.2.9 Signage. Construction or placement of any signs, billboards, or other advertising displays on the Property is not permitted, except that signs whose placement, number, and design do not significantly diminish the scenic character of the Property may be placed to state the name and address of the Property and the names of persons living on the Property, to advertise or regulate permitted on-site activities, to advertise the Property for sale or rent, to post the Property to control unauthorized entry or use, or to identify the property as being protected by this Conservation Easement.

2.2.10 Invasive Species. There shall be no further planting of invasive or potentially invasive non-native plant species anywhere on the Property. Grantee will provide a list of potentially invasive species upon request.

2.2.11 Predator and Nuisance Species Control. Grantor, with written approval of Grantee and Third Party (ies), shall have the right to control, destroy, or trap predatory, exotic, invasive, and problem animals that pose a material threat to people, livestock, other animals, or habitat conditions in accordance with applicable state and federal laws and requirements.

2.2.12 Excavation and Mineral Extraction. There shall be no change in the topography of the Property except as expressly provided in the Mitigation Plan and unless approved in writing by the Grantee and Third Party (ies). There shall be no surface filling, excavating, grading, dredging, mining, drilling, exploration of minerals or mineral rights, or alteration of the Property. Surface mining or exploitation of topsoil, peat, sand, gravel, rock, minerals of the surface estate, (including near-surface lignite, iron, or coal), or other materials is expressly prohibited.

2.2.13 Pollution, Disturbance to Hydrology. There shall be no pollution, alteration, depletion, or extraction of surface water, natural water courses, lakes, ponds, marshes, wetlands, or any other water bodies, nor shall activities be conducted on the Property that would be detrimental to water purity or that could alter the natural water level or flow in or over the Property.

2.2.14 Hunting, Fishing, or Trapping. Commercial leasing for hunting, fishing, or trapping is prohibited on the Property. The Grantor may allow personal or family hunting, fishing, or trapping activities in accordance with appropriate federal, state, and local laws and in accordance with restrictions properly imposed by the Mitigation Plan.

2.3 Grantee or its successors in interest may determine with the approval of the Third Party (ies) that a disturbance at the Property is necessary to maintain the Conservation Easement for the life of this Conservation Easement. Additionally, in the event of an emergency, Grantee or its successors in interest may determine that a disturbance at the Property is necessary to reduce the threat to human health or the environment. However, any such determination must be reasonable, made in writing, and signed by Grantee after effective notification and approval of Third Party (ies) and the USACE or their designated representative.

Grantor or Grantor's respective agents, assigns, successors, or personal representatives, or potential or actual purchasers, lessees, or other users of the Property shall notify Grantee and Third Party (ies) of any activities on the Property that are inconsistent with the intended Purposes of this Conservation Easement.

3.0 BASELINE DOCUMENTATION {*PROJECT SPECIFIC: ENTER AS APPLICABLE.*}

A Baseline Documentation Report providing specific ecological characteristics of the Conservation Easement was prepared pursuant to Treas. Reg. § 1.170A-14(g) (5) and establishes the baseline condition of the Property at the time of the grant of this Conservation Easement (**Exhibit E**). The Baseline Documentation includes maps, depictions of existing buildings and other human-made modifications, identification of flora and fauna, land use history, distinct natural features, and photographs. The Baseline Documentation Report is intended to serve as an accurate representation of the Property at the time of this conveyance. The Baseline Documentation Report is also an objective baseline that will be used for monitoring purposes and to assure that any future change in the use of the Property will be consistent with the terms of this Conservation Easement. However, this Baseline Documentation Report is not intended to preclude the use of other evidence to establish the present condition of the Property if there is a controversy over its use.

4.0 MINERAL INTERESTS; OTHER ENCUMBRANCES {*PROJECT SPECIFIC: ENTER SECTION AS APPLICABLE. MAY USE IF GRANTOR IS* ***NOT*** *THE OWNER OF MINERAL RIGHTS. ALSO SEE SECTION 21.*}

This Conservation Easement is subject and subordinate to the existing rights of certain third party mineral estate owner(s), ground leases, and other encumbrances to the title of the Property. Grantor is the surface owner of the Property. Grantor herein represents that there is a waiver of the right to use any of the surface of the Property for production of oil, gas, and other minerals reserved thereby and that furthermore, Grantor has entered into an agreement with the owner of the mineral rights to waive all surface interest in mineral exploration within the Property and that any exploration, development, or production of these rights must utilize offsite drilling or extraction locations and horizontal/diagonal drilling techniques. Grantor shall not be deemed in violation of this Conservation Easement to the extent that the provisions of this

Conservation Easement are, by reason of subordination, not binding upon the holder of such outstanding interest. Grantor shall ensure that the holder of any encumbrance complies with all applicable statutes and regulations and with all conditions of any applicable easement, lease, right-of-way, surface use agreement, or similar document, including any requirement to restore any adversely affected area to its pre-existing condition. Grantor shall be responsible for restoring any adversely affected area to its pre-existing condition.

5.0 GRANTOR'S RESERVED RIGHTS

5.1 Existing Uses. The Grantor expressly reserves for itself, its successors, and assigns, the right of access to and the right of continued use of the Property for all purposes not expressly restricted by this Conservation Easement. Granted herein, but not limited to, the right to quiet enjoyment of the Property, the rights of ingress and egress with respect to the Property, and the right to: {*PROJECT SPECIFIC: ADD AS APPROPRIATE. E.G., HUNT, FISH, AND HIKE ON THE PROPERTY, THE RIGHT TO CONDUCT NATURE OBSERVATION AND STUDY, THE RIGHT TO FENCE THE PROPERTY, AND TO PROHIBIT PUBLIC ACCESS.*}

{*MITIGATION BANK PROJECT-SPECIFIC: ADD AS NECESSARY*} In addition, subject to the limitation of Section 2, the grantor reserves the activities and uses described in the Mitigation Banking Instrument, and it is expressly agreed that such uses are not in violation of this Conservation Easement or its Purposes and do not adversely affect the Conservation Values of the Property list in Section 1.5.

5.2 Transfer. The Grantor shall have the right to sell, give, mortgage, lease, or otherwise transfer or convey the Property to any third party, subject to the terms of this Conservation Easement. Grantor agrees that the terms, conditions, restrictions, and Purposes of this Conservation Easement or references hereto will be inserted by Grantor in any subsequent deed or other legal instrument by which Grantor divests either the fee simple title to the Property, any possessory interest, or other interest in the Property. In the event that Grantor sells, gives, mortgages, leases, or otherwise transfers or conveys the Property to any other person, agency, or entity, Grantor shall notify Grantee and Third Party (ies) in writing at least thirty (30) days prior to such transfer of the Property. The document of conveyance shall expressly refer to this Conservation Easement and have the organizational and financial resources to undertake Grantee and Third Party (ies) responsibilities hereunder. Grantee and Third Party (ies) shall notify the USACE upon receipt of Grantor's intent to transfer the Property as per the requirements in Section 16 of this document. Before or at the time the Grantor notifies the Grantee and Third Party (ies) of the transfer, Grantor must provide documentation to Grantee, Third Party (ies), and USACE that the party taking title to the Property has been notified and agrees to accept the Conservation Easement and its requirements and restrictions.

6.0 GRANTOR'S OBLIGATIONS

The Grantor, it heirs, successors, and assigns shall comply with the terms and provisions of this Conservation Easement in perpetuity.

7.0 RIGHTS OF GRANTEE AND THIRD PARTY (IES) {*PROJECT SPECIFIC: ENTER OR REMOVE SECTIONS AS APPLICABLE*}
To accomplish the Purposes of this Conservation Easement, the following irrevocable rights are conveyed to Grantee and Third Party (ies) (to be exercised individually or collectively) by this Conservation Easement.

7.1 Right to Enter. The Grantee and/or Third Party (ies), their employees, or their authorized representatives, successors, and assigns, shall have the right to enter the Property at all reasonable times for the purpose of inspecting the Property to determine if the Grantor or any of its successors and assigns is complying with the terms, conditions, restrictions, and Purposes of the Conservation Easement. The Grantee and/or Third Party (ies) may not unreasonably interfere with the Grantor's permitted uses of the Property. The Grantee and Third Party (ies) have no right to permit others to enter the Property. The general public is not granted access to or any other rights in the Property under this Conservation Easement.

7.2 Right to Preserve. The Grantee and Third Party (ies) have the right, through the remedies set forth in Section 8, to prevent any activity on or use of the Property that is inconsistent with the Purposes of this Conservation Easement.

7.3 Right to Require Restoration. The Grantee and Third Party (ies) have the right, through remedies set forth in Section 8 of this document, to require the Grantor to restore the areas or features of the Property that are damaged by any activity that is inconsistent with the Purposes of this Conservation Easement. The Grantor agrees to promptly restore the damaged area or feature to its prior condition. Before undertaking the restoration work, the Grantor shall:

7.3.1 confer with the Grantee and Third Party (ies) regarding a plan for the restoration of the Property;

7.3.2 prepare and provide to the Grantee and Third Party (ies) a detailed restoration plan; and

7.3.3 obtain Grantee's and Third Party's (ies') written approval of proposed restoration plan, which will not be unreasonably held.

8.0 GRANTEE'S AND THIRD PARTY'S (IES') REMEMDIES {*PROJECT SPECIFIC: ENTER OR REMOVE SECTIONS AS APPLICABLE*}

8.1 Delay in Enforcement. A delay in enforcement shall not be construed as a waiver of Grantee's and Third Party's (ies) right to eventually enforce the terms of this Conservation Easement. The failure of Grantee and Third Party (ies) to discover a violation or to take immediate legal action shall not bar it from doing so at a later time.

8.2 Acts Beyond Grantor's Control. The Grantee and Third Party (ies) may not bring an action against the Grantor for modification to or damage of the Property resulting from causes beyond the Grantor's control, including but not limited to, unauthorized actions by third party (ies), natural disasters such as unintentional fires, floods, storms, or natural earth movement, provided such modification or damage does not adversely and materially affect the Purposes of the Conservation Easement Property. In the event of such an emergency, the Grantor may

respond to such an emergency in a way that is not inconsistent with the Purposes of the Conservation Easement. The Grantee and Third Party (ies) may not bring an action against the Grantor with respect to any technical violation of this Conservation Easement that results from the emergency responses. If the terms of the Conservation Easement are violated by unauthorized actions of a third party (ies), the Grantor may, but is not required to, at the Grantee's and Third Party's (ies') request, allow the Grantee and Third Party (ies) to join in any suit, to assign the Grantor's right of action to the Grantee and Third Party (ies), or to appoint the Grantee and Third Party (ies) as the Grantor's attorney-in-fact, for the purposes of pursuing an enforcement action against the responsible party (ies).

{MITIGATION BANK PROJECT-SPECIFIC: REPLACE THE SECTION 8.2 WITH THE FOLLOWING}

8.2 Acts Beyond Grantor's Control. The Grantee and Third Party (ies) may not bring an action against the Grantor for modification to or damage of the Property resulting from causes beyond the Grantor's control, including but not limited to, unauthorized actions by third party (ies), natural disasters such as unintentional fires, floods, storms, or natural earth movement, provided such modification or damage does not adversely and materially affect the Purposes of the Property. In the event of such an emergency, the Grantor may respond to such an emergency in a way that is not inconsistent with the Purposes of the Conservation Easement. In the event of such an emergency, Grantor may respond to such emergency in a way that is not inconsistent with the goals of the Conservation Easement and the Mitigation Banking Instrument. The Grantee and Third Party (ies) may not bring an action against the Grantor with respect to any technical violation of this Conservation Easement which results from the emergency responses. If the terms of the Conservation Easement are violated by unauthorized actions of a third party (ies), the Grantor may, but is not required to, at the Grantee's and Third Party's (ies') request, allow the Grantee and Third Party (ies) to join in any suit, to assign the Grantor's right of action to the Grantee and Third Party (ies), or to appoint the Grantee and Third Party (ies) as the Grantor's attorney-in-fact, for the purposes of pursuing an enforcement action against the responsible party (ies).

8.3 Notice and Demand. If the Grantee and Third Party (ies) believe that the Grantor is in violation of this Conservation Easement, or that a violation is threatened, the Grantee and Third Party (ies) shall provide written notice to the Grantor. The written notice will identify the alleged violation and request corrective action to cure the violation, and where the Property has been injured, to restore the Property within a reasonable timeframe. If Grantor fails to cure the violation within a reasonable time frame, the Grantee and Third Party (ies) may pursue its remedies to protect, restore, or compensate for the Purposes of the Conservation Easement.

If, at any time, the Grantee and Third Party (ies) reasonably believe that the violation constitutes immediate and irreparable harm for which an immediate remedy is needed, no prior written notice is required. The Grantee and Third Party (ies) may immediately pursue remedies to prevent or limit harm to the Property. If the Grantee and Third Party (ies) believe that this Conservation Easement is, or is expected to be, violated, and the Grantee's and Third Party's (ies') good-faith and reasonable efforts to notify the Grantor are unsuccessful, the Grantee and Third Party (ies) may pursue their lawful remedies to mitigate or prevent harm to the Property without prior notice and without awaiting the Grantor's opportunity to cure. The Grantor agrees to reimburse all reasonable costs, including attorneys' fees, associated with this effort in the

event of an actual violation of this Conservation Easement as determined by a court of competent jurisdiction or by agreement of the Parties, subject to the provision of Section 8.2 of this Conservation Easement.

The Grantor agrees that the Grantee and the Third Party (ies) reserve the right to assert the following hierarchy of corrective actions to any and all material violations of this Conservation Easement (subject to the provision of Section 8.2 of this Conservation Easement):

8.3.1 Grantor shall restore, according to a plan approved by the Grantee and Third Party (ies), the damaged area or feature of the Property to its condition prior to the violation; or

8.3.2 If the Grantee and Third Party (ies) determine that restoration is not likely to be successful with regard to all of the damaged area or feature of the Property, then to the extent reasonably practicable, the Grantor shall convey, within one year of the notice of violation, a new Conservation Easement acceptable to and approved by the Grantee and Third Party (ies) on a nearby parcel of land equivalent to that which existed on the damaged area or feature of the Property prior to the violation.

If actions of the Grantor, or those of any third party authorized by the Grantor, render it impossible to fulfill the Purposes or substantially diminish the Purposes of the Conservation Easement or a portion thereof, then the Grantee shall be compensated by the Grantor for such loss with respect to the portion of the Property affected by such actions equivalent to (a) the difference between the current market value of such portion of the Property unencumbered with this Conservation Easement less the current market value of such portion of the Property encumbered with this Conservation Easement, including (b) reasonable attorneys' fees.

8.4 Failure to Act. If, within 30 days after written notice, the Grantor fails to implement corrective measures as requested by the Grantee and Third Party (ies), the Grantee and Third Party (ies) may bring an action in law or in equity to enforce the terms of the Conservation Easement. In the case of immediate or irreparable harm, the Grantee and Third Party (ies) may invoke these same remedies without notification and/or awaiting the expiration of the 30-day period.

The Grantee and Third Party (ies) are entitled to enjoin the violation through temporary restraining order or permanent injunctive relief, and to seek specific performance, declaratory relief, restitution, reimbursement of expenses, and/or an order compelling the Grantor to restore the Property. If a court with jurisdiction determines that a violation may exist, or has occurred, Grantee and Third Party (ies) may obtain an injunction to stop it, temporarily or permanently. A court may also issue an injunction requiring Grantor to restore the Property to its condition prior to the violation.

8.5 Actual or Threatened Non-Compliance. The Grantee's and the Third Party's (ies) rights under this Section [Grantee's and Third Party's (ies') Remedies] apply equally in the event of either actual or threatened violation of the terms of this Conservation Easement. The Grantor

agrees that the Grantee's and the Third Party's (ies') claim for monetary damages for any violation of the terms of this Conservation Easement is inadequate. The Grantee and Third Party (ies) shall also be entitled to affirmative and prohibitive injunctive relief and specific performance, both prohibitive and mandatory.

8.6 Cumulative Remedies. The preceding remedies of the Grantee and Third Party (ies) are cumulative. The Grantee and Third Party (ies) may invoke any, or all, of the remedies if there is an actual or threatened violation of the Conservation Easement.

9.0 NOTIFICATION OF PERMITTED ACTIVITIES {*MITIGATION BANK PROJECT-SPECIFIC: ADD THIS SECTION AS NECESSARY*}

The purpose of requiring the Grantor to notify Grantee and Third Party (ies) prior to undertaking certain permitted activities is to afford the Grantee and Third Party (ies) an opportunity to review and approve, conditionally approve, or object to the activities in question and enable the Grantee and Third Party (ies) to ensure that any such activities are designed and will carried out in a manner not inconsistent with the Purposes of this Conservation Easement. This notification requirements applies on to the permitted activities listed in the Mitigation Banking Instrument as requiring notice by the Grantor, unless otherwise provide herein.

Whenever notice is required, the Grantor shall notify the Grantee and Third Party (ies) in writing with the time period specified in **Exhibit C** (Mitigation Banking Instrument) for such activity prior to the date the Grantor intends to undertake the activity in question. The notice shall describe the purposed activity in sufficient detail to permit the Grantee and Third Party (ies) to make an informed judgment as to the proposed activity's consistency with the Purposes of this Conservation Easement. If the Grantee and Third Party (ies) fails to respond within fifteen (15) days after it receives the written request, then its approval shall be deemed given.

In addition, the Grantor shall notify the Grantee and Third Party (ies) in writing no less than thirty (30) days prior to the closing of the sale or gift of the Property to any other party.

10.0 REQUIREMENTS UNDER TEXAS LAW AND UNITED STATES TREASURY REGULATIONS

10.1 This Conservation Easement is created pursuant to Chapter 183 of the Texas Natural Resources Code — § 183.001 et seq.

10.2 This Conservation Easement is established for conservation purposes pursuant to the Internal Revenue Code, as amended at Title 26, U.S.C.A., Section 170(h)(1)–(6) and Sections 2031(c), 2055, and 2522, and under Treasury Regulation at Title 26 C.F.R. 1.170A-14 et seq., as amended.

10.3 The Grantee is qualified to hold conservation easements pursuant to these statues.

10.4 This Conservation Easement will be construed in accordance with Texas law, without application of its conflict of laws principles.

11.0 OWNERSHIP COSTS AND LIABILITIES

The Grantee and the Third Party (ies) shall have no liability or other obligation for costs, liabilities, taxes, assessments, fees, charges of whatever description, or insurance of any kind related to the Property in accepting this Conservation Easement, unless such costs or liabilities are the result of Grantee's or Third Party's (ies') negligence or willful misconduct. The Grantor shall provide satisfactory evidence of payment of all such costs and liabilities upon request by the Grantee and Third Party (ies). The rights of the Grantee and the Third Party (ies) do not include the right, in absence of a judicial decree, to enter the Property for the purpose of becoming an owner or operator of the Property or becoming an arranger with respect to the Property within the meanings of the Comprehensive Environmental Response, Compensation, and Liability Act, or the Texas Solid Waste Disposal Act. The Grantee and the Third Party (ies), their members, trustees or directors, officers, employees, and agents have no liability arising from injury or death to any person or physical damage to any personal property on the Property, except to the extent such injury or death results from Grantee's or Third Party's (ies') negligence or willful misconduct. The Grantor remains solely responsible for obtaining any applicable governmental permits and approvals for any activity or use allowed by this Conservation Easement, and all such activities or uses shall be undertaken in accordance with all applicable federal, state, and local laws, regulations, and requirements. The Grantor shall keep the Property free of all liens.

12.0 LIABILITY AND INDEMNIFICATION

The Grantor, the Grantee , and the Third Party (ies) agree to release, hold harmless, defend, and indemnify the other from any and all liabilities including, but not limited to, injury, losses, damages, judgments, costs, expenses, and fees that the indemnified Party may suffer or incur as a result of or arising out of the activities of the other Party on the Property that cause injury to a person or damage to any property, except to the extent caused or contributed to by the actions or omissions of the indemnified Party.

13.0 HAZARDOUS MATERIALS

The Grantor warrants that the Grantor has no actual knowledge of the deposit of, release, or storage of hazardous substances or hazardous wastes, as defined by any local, state, or federal law, on the Property.

14.0 LITIGATION

The Grantor warrants that the Grantor has no actual knowledge of any pending or threatened litigation relating in any way to the Property. The Grantor also warrants that the Grantor has no actual knowledge of any civil or criminal proceedings or investigations against Grantor that have at any time related to the Property.

15.0 TERMINATION OR EXTINGUISHMENT OF CONSERVATION EASEMENT

This Conservation Easement may be extinguished only by a change in condition that causes it to be impossible to fulfill the Conservation Easement's Purposes, or by exercise of eminent domain.

15.1 Eminent Domain. If the Property is taken in whole or in part by power of eminent domain, or acquired by purchase in lieu of condemnation, whether by public, corporate, or other authority, so as to render it to be impossible to fulfill any of the Purposes of this Conservation Easement, then Grantor, Grantee, and Third Party (ies) shall take appropriate actions at the time of the taking to recover the full value of the taking and all incidental or direct damages resulting from it, and the proceeds shall be placed in a trust account for the purpose of conducting conservation activities or acquiring alternate property. Grantor, Grantee, and Third Party (ies) shall be named as co-trustees on the account with rights to fund the conservation activities or acquire alternate property.

{MITIGATION BANK PROJECT-SPECIFIC: REPLACE SECTION 15.1 WITH THE FOLLOWING SECTIONS 15.1 THROUGH 15.1.4}

15.1 Eminent Domain. If the Property is taken, in whole or in part, by the power of eminent domain or acquired by purchase in lieu of condemnation so as to render it to impossible to fulfill the Purposes (any Purpose) of this Conservation Easement, then the Grantor and the Grantee and Third Party (ies) shall act jointly to realize the action most favored by the Grantee according to the following hierarchy:

15.1.1 avoiding the Property and preserving it in its present condition: the Grantor, Grantee and Third Party (ies) shall jointly take actions to formally request that the intended proceeding completely avoid the taking of this Property;

15.1.2 minimizing and supplementing the loss to the Property: if the Property can not be wholly preserved as a result of the intended proceeding, the Grantor, Grantee and Third Party (ies) shall jointly take actions to formally request that the intended proceed minimize its taking of this Property and supplement, on at least a 1:1 acreage basis of nearby land possessing equivalent over-all value, including without limitation Conservation Values (Section 1.5) and mitigation credit values, the loss of the Property with a supplemental Conservation Easement conveyed to the Grantee within one year of notice of the intended proceeding.

15.1.3 mitigation the loss of the Property: if the options presented in Sections 15.1.1 and 15.1.2 are not acceptable to the Grantee Third Party (ies), the Grantor, Grantee and Third Party (ies) shall jointly take actions to formally request that the intended proceeding mitigate its taking of this Property, on at least 1:1 acreage basis of nearby land possessing equivalent over-all value, including without limitation Conservation Values (Section 1.5) and mitigation credit values, by conveying replacement Conservation Easement to the Grantee Third Party (ies) within two (2) years of notice of intended proceeding; or

15.1.4 recover full value: if the options presented in Sections 15.1.1, 15.1.2 and 15.1.3 are not acceptable to the Grantee Third Party (ies), the Grantor, Grantee and Third Party (ies)shall jointly take actions to recover the full value of the interests in the Property subject to the taking or in lieu purchase and all direct or incidental damages resulting from the taking or in lieu purchase. All expenses reasonably incurred by the Grantor and the Grantee in connection with the taking or in lieu purchase shall be paid out of the amount recovered in proportion to the value of

the interests taken from each party (including the value of the mitigation credits not longer able to be sold by Grantor). If the Conservation Easement is terminated and the Property is sold or taken for public use, then, as required by Treas. Reg. § 1.170A-14(g)(6), Grantee shall be entitled to a percentage of the gross sales proceeds or condemnation award (minus any amount attributable to new improvements made after the date of this conveyance, which amount shall be reserved to Grantor) equal to the ratio of the appraised value of this Conservation Easement to the unrestricted fair market value of the Property, as theses values are determined on the date of this Conservation Easement.

15.2 Change of Condition. If it is determined that conditions on or surrounding the Property have changed so much that it is impossible to fulfill the Conservation Easement Purposes, this Conservation Easement may be partially or entirely terminated only by judicial proceedings following written notification and agreement by the USACE, and in a manner that complies with Treasury Regulations Section 1.170A-14(c)(2).

At the time of conveyance of this Conservation Easement to Grantee, this Conservation Easement gives rise to a real property right immediately vested in Grantee. If this Conservation Easement is extinguished and the Property is sold or taken for public use, then as required by Treasury Regulations Section 1.170A-14(g)(6), Grantee shall be entitled to a percentage of the gross sale proceeds or condemnation award (minus any amount attributable to new improvements made after the date of this conveyance, which amount shall be reserved to Grantor) equal to the ratio of the appraised value of this Conservation Easement to the unrestricted fair market value of the Property, as these values are determined on the date of this Conservation Easement. Grantor's said proceeds shall be placed in a trust account for the purpose of conducting conservation activities or acquiring alternate property. Grantor, Grantee, and Third Party (ies) shall be named as co-trustees on the account with rights to fund conservation activities or acquire alternate property.

16.0 AMENDMENT OF CONSERVATION EASEMENT

This Conservation Easement may be amended or modified only with the written consent of Grantor, Grantee, and Third Party (ies) with prior notification and approval of the USACE. No amendment shall be allowed that will affect the qualification of this Conservation Easement or the status of the Grantee under any applicable laws, including Sec. 170(h) of the Internal Revenue Code, or any regulations promulgated in accordance with that section as amended. Any such amendment shall also be consistent with Texas Natural Resources Code § 183.001 *et seq.*, or any regulations promulgated pursuant to that law. Any such amendment shall be consistent with the Purposes of this Conservation Easement and shall not affect the perpetual duration of this Conservation Easement. Grantor, Grantee, and Third Party (ies) have no right or power to agree to any amendment that would adversely affect the enforceability of this Conservation Easement.

{MITIGATION BANK PROJECT-SPECIFIC: REPLACE SECTION 16 AS NECESSARY}
This Conservation Easement may be amended or modified only with the written consent of Grantor and Grantee with prior notification and approval of the USACE. No amendment shall be allowed that will affect the qualification of this Conservation Easement or the status of the

Grantee under any applicable laws, including Sec. 170(h) of the Internal Revenue Code, or any regulations promulgated in accordance with that section as amended. Any such amendment shall also be consistent with Texas Natural Resources Code § 183.001 *et seq.*, or any regulations promulgated pursuant to that law. Further, any amendment shall be consistent with the Purposes of this Conservation Easement, shall not diminish the Conservation Values of the Property (Section1.5), shall not affect the ability of the Property to be used as a mitigation Bank, and shall not affect the perpetual duration of this Conservation.

17.0 LIBERAL CONSTRUCTION {*MITIGATION BANK PROJECT-SPECIFIC: ADD THIS SECTION AS NECESSARY*}

This Conservation Easement shall be liberally construed in favor of maintaining the use of the Property as a mitigation bank, maintaining the Conservation Values (Section 1.5) and in accordance with Conservation Easements, Chapter 183 of the Texas Natural Resources Code - § 183.001 *et seq.*

18.0 NOTICES

For purposes of this agreement, notices may be provided to either party by personal delivery, private courier, or by mailing a written notice to the Party (at last known address of a Party) by certified mail, return receipt requested. All notice(s) shall be deemed to be delivered and effective upon actual receipt if given personally, by private courier, or three days after deposit with the United States Postal Service, if given by mail. All notices provided to the parties shall also be provided to USACE via certified mail.

18.1 **GRANTOR:** {*ENTER NAME, ADDRESS, AND CURRENT CONTACT INFORMATION*}

18.2 **GRANTEE:** {*ENTER NAME, ADDRESS, AND CURRENT CONTACT INFORMATION*}

18.3 **THIRD PARTY:** {*ENTER NAME AND ADDRESS OF EACH THIRD PARTY CONTRACT PARTICIPANT*}

18.4 **USACE:** A copy of any notice sent by Grantor or Grantee to be sent to USACE as follows:
Regulatory Branch (CESWF-PER-R)
Fort Worth District
United States Army Corps of Engineers
P.O. Box 17300
Fort Worth, Texas, 76102-0300.
Telephone: 817-886-1731
Facsimile: 817-886-6493

19.0 SEVERABILTY

If any portion of this Conservation Easement is determined to be invalid, the remaining provision

20.0 SUCCESSORS

Grantor may transfer, sell, or otherwise convey the Property to a third party, so long as conveyance is expressly made subject to the terms of this Conservation Easement. This Conservation Easement is binding upon, and inures to the benefit of, the Grantor's, the Grantee's and the Third Party's (ies') successors in interest. All subsequent owners of the Property are bound to all provisions of this Conservation Easement to the same extent as the Grantor.

21.0 ASSIGNING CONSERVATION EASEMENT

The Grantee may transfer this Conservation Easement to a similar entity upon consent of the Grantor, the Third Party (ies), and the USACE, which shall not be unreasonably withheld. The Grantee may only assign its rights and obligations under this Conservation Easement to a qualified organization as defined by the Internal Revenue Code, Section 170(h) (or any successor provision then applicable), under the Texas Natural Resources Code, Section 183 (or any successor provision then applicable), and any applicable laws of the United States.

Any assignment of this Conservation Easement shall obligate the Grantee to:

(a) require that the Purpose(s) of this Conservation Easement continue to be carried out, and

(b) transfer to the new holder the balance of the stewardship funds allocated to this Conservation Easement.

The Grantee agrees to give written notice and request to Grantor, the Third Party (ies), and the USACE at least sixty (60) days prior to the date of such proposed assignment. If Grantor, the Third Party (ies), or the USACE fail to respond to Grantee's request for consent within thirty (30) days of receipt of such request, the Grantor, the Third Party (ies), and the USACE shall be deemed to have consented to such request.

22.0 TERMINATION OF RIGHTS AND OBLIGATIONS

A Party's rights and obligations under this Conservation Easement terminate upon transfer of that Party's interest in the Property. Liability for acts or omissions occurring prior to transfer will survive the transfer.

23.0 TITLE

Grantor covenants and represents that Grantor is sole owner and is seized of the surface interest in the Property in fee simple and has good right to grant and convey this Conservation Easement; that the property is free and clear of any and all encumbrances, including but not limited to, any mortgages not subordinated to this Conservation Easement; and that the Grantee and Third Party (ies) shall have use of and enjoy all benefits derived from and arising out of the Conservation Easement.

{PROJECT SPECIFIC; MAY DELETE AS NECESSARY, SEE SECTION 4}
The Parties acknowledge that the Grantor is not seized of the subsurface or mineral interest in the Property, that other parties are vested with such interests pursuant to instruments recorded prior

to the date of this Conservation Easement, and that this Conservation Easement is subordinate to such interests.

24.0 ACCEPTANCE AND EFFECTIVE DATE

Grantee shall file this Agreement of record with the County Clerk of _____ County, Texas, within ten (10) days after the Effective Date of this Agreement and provide a copy of the recorded Agreement to Third Party (ies), USACE, and Grantor within thirty (30) days of its return from the County Clerk of _____ County.

TO HAVE AND TO HOLD the Conservation Easement for the Purposes herein described, subject, however, to the matters herein set forth and to all matters of record with respect to the Property, unto Grantee and Third Party (ies), their successors, and assigns, forever; and Grantor does hereby bind itself, its successors, and assigns to warrant and defend the Conservation Easement and the rights granted herein, unto Grantee and Third Party (ies), their successors, and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof by, through, or under Grantor, but not otherwise.

EXECUTED and DELIVERED to be effective as of the Effective Date.

GRANTOR: {*ENTER LEGAL NAME OF GRANTOR*}

By:_____
{*SIGNEE NAME*}
{*SIGNEE TITLE*}

STATE OF TEXAS §
§
COUNTY OF _____ §

This instrument was acknowledged before me on _____ by _____, {TITLE} of _____ on behalf of the said {LEGAL NAME OF GRANTOR}.

_____
Name:
Notary Public, State of Texas
My commission expires:_____

GRANTEE: {*ENTER LEGAL NAME OF GRANTEE*}

By:_____
{*SIGNEE NAME*}
{*SIGNEE TITLE*}

STATE OF TEXAS §
§
COUNTY OF _____ §

This instrument was acknowledged before me on _____ by _____, {TITLE} of _____, on behalf of the said {LEGAL NAME OF GRANTEE}.

_____
Name:
Notary Public, State of Texas
My commission expires:_____

THIRD PARTY: {*ENTER LEGAL NAME OF GRANTEE. ADD NEW SHEET FOR EACH ADDITIONAL THIRD PARTY*}

By:_____
{*SIGNEE NAME*}
{*SIGNEE TITLE*}

STATE OF TEXAS §
§
COUNTY OF _____ §

This instrument was acknowledged before me on _____ by _____, {TITLE} of _____, on behalf of the said {LEGAL NAME OF GRANTEE}.

_____
Name:
Notary Public, State of Texas
My commission expires:_____

Exhibit A

Legal Description of the Property

{To Be Included}

Exhibit B

U.S. Army Corps of Engineers Permit

{To Be Included}

Exhibit C

Baseline Documentation Report
{Project Specific Requirement}

Exhibit D

Mitigation Banking Instrument
{*Project Specific Requirement*}

ATTACHMENT B

CE Paragraph Databank

(June 1, 2009, last edited October 27, 2009)

This Databank is a work in progress assembled by the Stanford Conservation and Climate Change Drafting Committee and a number of CE attorneys and other professionals assisting in the work. See Stanford Institute for the Environment at http://environment.stanford.edu/cgi-bin/index.php. Additional paragraphs will be added as they become available, and existing paragraphs will be edited or commentary added when reasons to do so become apparent.

The Databank assumes its users are knowledgeable and thoughtful conservation easement professionals or volunteers. See Land Trust *Standards and Practices* 9E. It is not a teaching text. Instead, it offers source material and ideas, sometimes conflicting and inconsistent ideas, that may be appropriate to adapt into particular easements in certain circumstances. The Databank is also not legal advice; various paragraphs conflict, and many would be inappropriate to specific circumstances or under the law of particular States. There has been no effort to address special state law requirements. Moreover, every easement will require the addition of one or more unique paragraphs and revision of the sample paragraphs set out here to address the characteristics of the specific property and situation.

The Committee is concentrating its early effort on paragraphs that address climate change issues and the need to draft easements for perpetuity in a changing world. The Databank has been prepared specifically for donated perpetual easements and for land trusts. Although some paragraphs may be appropriate in other circumstances, and the Databank may be expanded in the future, the Committee has not included paragraphs specifically intended for mitigation or purchased easements. Many additional sample paragraphs are available in *The Conservation Easement Handbook*, by Elizabeth Byers and Karin Marchetti Ponte (2005) (The Trust for Public Land and The Land Trust Alliance) and its companion CD, and that source should be consulted often.

Paragraphs are drawn from multiple sources, and readers are invited and encouraged to send entire conservation easements or individual paragraphs to Ann Taylor Schwing at aschwing@mhalaw.com. Whatever the source, paragraphs will be revised to a uniform style with specific identifying information deleted before being included in the Databank. Please send any corrections or suggestions for edits, additional commentary, or other information that would assist the users. The Committee hopes to make this complete Databank available through The Land Trust Alliance when time permits Alliance personnel to review it and make a home for it.

Do not be daunted by the length of the Databank. No easement would use all of these

paragraphs. In many instances, multiple examples of possible versions of a specific paragraph are provided to address different circumstances. Some version of certain paragraphs is mandatory in any easement, while others can be omitted entirely in certain cases. As the Databank develops, guidance on these points may be added, but the Databank assumes that users have significant knowledge of easements and drafting requirements. See Land Trust *Standards and Practices* 9E. The paragraphs are also not equally desirable; when several paragraphs on the same subject are provided, they will appear roughly in order of greater conservation protection to lesser protection or in order of more beneficial to a land trust to less beneficial. Naturally, these decisions are matters of judgment on which reasonable minds may and probably do differ.

The Committee offers the following comments on uniform style and drafting principles:

- **Title.** Consider the title to use for the easement. Lay people do not know what a conservation easement is, so a future purchaser of the land may see reference to "Conservation Easement" or "Deed of Conservation Easement" on a title report and pay no attention. A title that conveys more information may reduce surprises and arguments of surprise. Examples would be "Deed of Conservation Easement Limiting Owners' Uses" or "Restrictions on Owners' Uses and Conservation Easement." State law may limit your options, but a short title that prevents prospective buyers from arguing ignorance can prevent a lawsuit. Use of a short title is important because title reports often pick up only one line or only a limited number of characters.

- **Grantor—Owner—Granting Owner.** The Databank uses the terms "Granting Owner" and "Owner" to distinguish between the original grantor when only that owner is intended and all owners when the intent is to encompass both the original grantor and all later owners. Many easements use the term "Grantor" to include subsequent owners. A court might forgive a subsequent owner for not realizing that references to "Grantor" included all subsequent owners as well. Using the term "Owner" whenever the reference is intended to encompass both grantor and subsequent owners reduces the risk of credible testimony by a subsequent owner as to a belief that the provision did not apply to subsequent owners. Having both terms available enables easier distinction when a provision is intended to apply only to the original donor. This terminology does not supplant use of the routine boilerplate provisions defining terms and declaring applicability of the easement to subsequent purchasers of the land. Anyone using the Databank can freely use "Landowner" as an alternative to "Owner" and can elect not to make the distinction between "Granting Owner" and "Owner."

- **Development Zone.** The Databank uses the term "Development Zone" but the term "Building Envelope" can be substituted if that term is preferred. Some think the term "Building Envelope" may connote a more limited disturbance to

the land. Other options are "Limited Building Area" or "Limited Improvement Area." For ease of drafting, it may be appropriate to define an "Agricultural Zone," "Forever Wild Zone" "Natural Zone," or other Zone or a "Resource Management Area." This drafting decision is highly dependent on the characteristics of the particular land and the anticipated permitted uses. Whatever decision is made, errors and ambiguities can easily develop from occasional misuse of the defined terms. As the easement nears completion, computer word searches for the defined terms can easily locate them all and permit the drafter to confirm use of the correct term in each location.

- **Agricultural Uses.** The databank uses the term "Agricultural Uses" in a few places. Again, use of defined terms in a consistent manner can ease the drafting process, shorten the easement and make it easier to understand.

- **Defined Terms.** It is essential that defined terms be defined correctly and then used consistently to avoid introducing errors and ambiguities into the easement. Defined terms used in the Databank include Easement, Granting Owner, Owner, Parties, Property, Agricultural Uses, Development Zone, Natural Zone, Forever Wild Zone, Easement Area, Commercial, Conservation Value. Using "Easement" in lieu of "Conservation Easement" will shorten most documents by a page.

- **Days.** Consider whether to specify some or all periods of days in the easement as business days rather than calendar days. If not, then build enough time into time periods to avoid impossible burdens if time periods include a three day weekend or the Thanksgiving weekend.

- **Notice and/or Approval Requirements.** Adding a requirement that the owner seek approval before exercising certain rights gives the land trust control over changes that may affect the land but also imposes on the land trust significant costs in time and, sometimes, money in evaluating the request, as well as risk of friction between land trust and owner. Establishing approval requirements also requires the land trust to address the requirements carefully or face potentially serious questions from the IRS that may affect the land trust's tax exempt status. Use approval requirements judiciously. The Databank paragraphs often include approval language, but it should be understood as a signal to think about whether prior approval is necessary for this activity on this particular land. In other words, the fact that the land trust could impose a prior approval requirement on an activity does not mean the requirement is necessary to the protection of conservation values on a particular property. In some circumstances, a notice requirement may suffice. In many others, neither notice nor approval may be needed if the owner's permission to act is properly defined. As an easement nears completion, a careful drafter may computer search for "notice" and "approv" to double check that the proper requirement is imposed in each instance.

- **Commentary.** Following particular paragraphs in blue and indented, the Databank provides commentary to explain special circumstances for using or avoiding the paragraph and other information unique to the paragraph.

Comments on preparing easement documents:

- **Justification.** Decide whether your organization wishes the text of its documents justified or not (ragged right). Both are entirely acceptable, but a combination of both in a single document is unattractive at best and can later be used (accurately or not) to argue as to the sources of different paragraphs. Similarly, make sure the margins are the same throughout the document.
- **Smart or dumb quotes.** - Again, for the same reasons, elect a style for your organization for quote marks and apostrophes and make sure the quote marks are uniform - either all straight or "dumb" marks or curly "smart" marks. Do the same for apostrophes (' or '). Not only does a random mixture look sloppy, but it also opens the door for an adverse owner to construct an argument later that certain paragraphs came from one source and others from a different source and that some consequence should ensue in the construction of the easement as a result.
- **Uniform capitalization.** Every effort is being made to ensure that all defined terms are capitalized. The opening section of the Databank sets out significant defined terms. Naturally, these terms will first appear early in an easement, often in the recitals, so the assumption of the Databank is that the definition will appear wherever the term first appears in a particular easement. At the end of the drafting process, a careful drafter will use the computer searching tool to search for each defined term to be sure it is capitalized. Inconsistency in the use of defined terms can enhance arguments that the document is ambiguous in a future lawsuit.
- **Paragraph numbers.** The paragraphs in the Databank avoid referring to other paragraphs by number because numbering is almost certain to change during drafting. For example, the Databank uses the formulation "permission of the Land Trust, as provided herein" instead of referring to "paragraph __." This formulation is deliberate because edits late in preparation of the document that alter the paragraph numbering are common, and the risk of misnumbering cross-references is high. An erroneous misnumbering can readily result in later disputes as to interpretation. An alternative that also avoids use of specific numbers would be to refer to the paragraph captioned "Discretionary Approval" or "Notice and Approval." If you include references to paragraphs using their numbers in an easement, highlight the numbers in color to ensure that you check them at the end and correct as needed. A bad cross-reference is likely to be much worse when a dispute arises than a reference to the subject matter "as provided herein."

- **Numbers.** To make things uniform, decide whether numbers will be written out, expressed as numerals and not as words, or both.
- **Areas, Zones and the Property.** If the easement uses terms like Development Zone, Agricultural Zone, Easement Area or the like, rather than or in addition to "Property," check all references carefully to ensure that the correct term is used in each instance. Use the search tool to locate and check things like this at the end of drafting, rather than trusting your ability to skim through the document. Even one error can create ambiguity and sometimes fatal problems.
- **Global Changes.** Computers ease document preparation enormously, but they add the possibility for new errors. Any global change poses great danger. For example, a donor may decide not to include a portion of the parcel in the easement part way through the drafting process, causing the drafter to change "Property" to "Easement Zone." A global change in these terms, however, may adversely impact access to the land under easement if the access route crosses the excluded land. Most drafters can identify other examples of errors from global changes. The few extra minutes to click each change may save a lawsuit later.
- **Notary forms.** If you are putting the notary forms on the signature pages, rather than relying on a title company, make sure you are using the latest version of the notary form. Statutory amendments alter the required form periodically.
- **Page Numbers.** Make sure that page numbers are set out on each page but do not include the exhibit pages in this numbering (an exhibit may need to be a separate document).

Various model easements adopt different approaches to ordering of the paragraphs, and the Databank has to appear in some order. The order of paragraphs below is not intended to reflect a rejection of the ordering used in different models, but only a recognition that there has to be some order and any order selected will differ from the order used in some models.

The important characteristic of the following paragraphs is that they adopt the approach recommended in *The Conservation Easement Handbook*, by Elizabeth Byers and Karin Marchetti Ponte (2005) (The Trust for Public Land and The Land Trust Alliance) to merge prohibitions and permissions so that all aspects of a particular use of the land are addressed in a single location. This approach has benefits for drafting and, in the future, for monitoring. Not all land trusts have adopted this approach. The paragraphs below can still provide ideas and possible language to be used in drafting, although more significant editing will be required. In either event, the essential drafting rule is to be very clear as to which provisions control if there is any possibility of conflict between permissions and prohibitions.

DEED OF CONSERVATION EASEMENT LIMITING OWNERS' USES

RECITALS

Identification of Granting Owner, Land Trust and others
General information about the land, introduction of any Zones
Factual recitals to establish public benefit, satisfaction of section 170(h)
Baseline
Granting Owner's intent
Land Trust's intent/qualification

AGREEMENT

Grant and Acceptance of Easement

Purposes

Rights of Land Trust

(1) Protection
(2) Entry
(2/3) Entry and Enforcement
(3) Enforcement
(4) Access
(4) Assignment of Owner's Access Rights
(5) Signage
(6) Interpretation
(7) Protection
(8) Reservation of Forest Carbon Services
(9) Additional Rights

Prohibitions, Restrictions and Reserved Rights

(1) Extinguishment of Development Rights
(2) Subdivision
(2) Lot Line Adjustments
(3) Structures
(a)(1) Fences
(a)(2) Gates
(b) Residential Use Prohibited
(b) Permitted Residential Use(s)
(b)(1) Existing Single-Family Residential Dwelling
(b)(2) New Single-Family Residential Dwelling
(b)(2) Guest Houses/Granny Units
(b)(2) Adjustable Residential Development Zone
(b)(2) Residential Use of Development Zone
(b)(3) Expansion of Existing Dwellings [Structures]
(b)(3) Modification or Relocation of Building Envelope
(b)(4) Placement and Size of Replacement Structures
(b)(4) Preservation of Historic Structures
(b)(5) Accessory Structures, Pools, Tennis Courts, and the Like
(c) Agricultural Structures and Improvements
(d) Existing Farm Support Housing
(d) Agricultural Employee Housing
(e) Farm Stand/Winery/Other Production or Agricultural Sales Facility
(e) Commercial Agricultural Activities
(e) Winer

(f) Caves
(g) Signs
(h) Art
(i) Boating/Recreational Structures
(j) Visual Screening
(k) [Catchall]
(l) Other Structures Prohibited
(4) Utilities/Utility Services and Septic Systems
(5) Surface Alterations Excepting Roads and Trails
(5) Soil Disturbance
(5) Removal, Mining and Extraction
(6) Paving, Road Construction and Trails
(a) Existing Road
(a) Existing and New Roads
(b) Foot Trails
(c) Impervious Surface
(7) Vehicles
(8) Water
(a) Existing Well
(a) Existing Water System
(b) Replacement Water Supply
(a&b) Water Systems
(b) Water Resource Development
(b) Irrigation Improvements
(c) Watershed Enhancement, Creek Restoration and Aquifer Enhancement
(d) No Transfer of Water Rights
(d) Limited Transfer of Water Rights
(e) Pollution Prohibited
(9) Trees and Other Vegetation
(a) General Rule
(b) Timber Harvest Plan
(b) Forest Management
(b) Forest Management Plan
(c) Use of Wood
(d) Additional Cutting
(e) Non-Native Exotics
(f) Protection of Existing Vegetation
(g) Harm to Vegetation
(h) Existing Meadow
(i) New Open Areas
(j) Fire
(10) Trash and Debris, Storage and the Like
(10) Dumping
(11) Agricultural Use Prohibited
(11) Agricultural Use Permitted
(a) Definition
(b) Prohibitions
(c) Standards and Practices
(d) Processing of Agricultural Residues
(12) Commercial or Industrial Use

(a) Definition
(b) Ecosystem Functions
(b) Ecosystem Services Credits
(b) Property Resources Values
(b) Mitigation Programs
(b) Natural Resource Benefits
(13) Recreational Uses
(14) Hunting, Trapping and Guns
(15) Amplified Sound and Outdoor Lighting
(16) Other Activities
(a) Ecological/Scientific Research
(b) Educational Activities
(c) Weddings and Events
(d) Optional Management Plans
(e) Use of Pesticides and Herbicides
(f) Invasive Plant Removal
(g) Future Technology
(17) Right to Privacy/Prevention of Trespass
(18) Acts of God
(19) Home Occupations
(20) Wind, Solar, and Hydropower Energy
(20) Renewable Energy Generation
(a) Commercial Energy Production
(b) Possible Future Commercial Energy Production
(c) Noncommercial Energy Production for Use on the Property
(20) Renewable Energy/Ancillary Improvements
(20) Ancillary Improvements
(20) Alternative Energy/Communications Structures and Improvements
(a) Building Envelope
(b) _____ Area
(c) Location
(d) Easement Governs
(21) Domestic and Wild Animals
(21) Grazing
(22) Boundaries
(23) Reserved Rights Exercised to Minimize Damage

Notice and Approval Process

(1) Notice of Intent To Undertake Activities or Uses
(a) Purpose
(b) Application
(c) Initial Response
(d) Costs
(2) Land Trust's Approval
(3) Inspection and Certification
(4) Discretionary Approval
(5) Notice of Land Trust's Obligations

Land Trust's Approval or Withholding of Approval

(1) General
(2) Land Trust Approval of Certain Uses or Activities
(3) Land Trust Approval of Sites

(4) Notice to Land Trust
Land Trust's Remedies
(1) Notice of Violation; Corrective Action
(2) Injunctive Relief
(3) Damages
(4) Emergency Enforcement
(5) Scope of Relief
(6) Costs of Enforcement
(7) Forbearance
(8) Waiver of Certain Defenses
(9) Change of Conditions
(9) Natural Events Beyond Owner's Control
(9) Economic Hardship
(10) Cumulative Remedies
Public Access
Responsibilities of Owner and Land Trust Not Affected
(1) Costs, Legal Requirements, and Liabilities
(2) Subsequent Liens on Property
(3) Subsequent Encumbrances
(4) Taxes
(5) Upkeep and Maintenance
(6) Liability for Operations and Conditions
(7) Indemnification by Owner
(8) Indemnification by Land Trust
Representations and Warranties
(1) No Hazardous Materials Liability
(2) Limited Status of Land Trust
(3) Storage Tanks
(4) Compliance with Law
(5) Litigation, Proceedings and Investigations
(6) Acts Beyond Owner's Control
(7) Granting Owner's Title Warranty
(8) Subordination
(9) No Representation of Tax Benefits
(10) Consideration
Condemnation or Other Extinguishment
(1) Valuation
(2) Application of Proceeds
(3) Highest and Best Use
(4) Extinguishment
Transfers and Amendments
(1) Transfer of Easement by Land Trust
(2) Subsequent Transfers by Owner
(2) Subsequent Transfers by Owner and Transfer Fee
(3) Estoppel Certificates
(4) Additional Easements
(5) Permitted Amendment
(5) Permitted Amendment Agreed to by Original Granting Owner Only
(5) No Amendment Permitted
Perpetuation of Easement/Perpetual Duration/Perpetual Duration—No Merger

Notices
Recordation/Recordation and Effective Date
General Provisions

(1) Controlling Law
(2) Liberal Construction
  (a) Construction Favoring Validity
  (b) Conflict in Conservation Values
(1/2) Controlling Law and Liberal Construction
(3) Significance of Recitals and Terms
(4) Severability
(5) Entire Agreement
(6) No Forfeiture
(7) Joint Obligation
(8) Successors and Assigns
(9) Termination of Rights and Obligations and Standing to Enforce
(10) No Oral Approval
(11) Reasonableness Standard
(11) Mediation
  (a) Purpose
  (b) Participation
  (c) Confidentiality
  (d) Time Period
  (e) Costs
(12) Binding Arbitration
  (a) Timing and Selection of Arbitrator
  (b) Law Governing and Entry of Judgment
  (c) Injunctive and Other Relief
  (d) Costs
(13) Captions
(14) Counterparts
(15) Representation of Authority of Signatories
(16) Representation by Counsel
(17) Appraisal; Tax Forms

Signature/Notary Blocks
Exhibits

DEED OF CONSERVATION EASEMENT LIMITING OWNERS' USES

THIS GRANT DEED OF CONSERVATION EASEMENT ("Easement" or "Conservation Easement") is made this _____ day of _____, 2009, by _____, a ____[State]_____[citizen/corporation/ partnership/limited partnership/_____ ("Granting Owner" and "Owner") in favor of _____ LAND TRUST, a _____ nonprofit corporation ("Land Trust").

Commentary. See the introductory explanation of "Granting Owner." Another approach is to omit the date from the opening paragraph and rely on the dated signatures and the date of recordation. All signatories may not sign on the same date, and they may forget to fill in the date in the opening paragraph. Depending on state law, a challenge can be raised if the date here differs from the signature date(s) at the end. Although unlikely to succeed, any challenge is expensive and wastes time.

THIS COMPLETE AMENDMENT AND RESTATEMENT OF DEED OF CONSERVATION EASEMENT ("Easement" or "Conservation Easement") is made this ____ day of _____, 2009, by _____ a ____[State]_____ ____[citizen/corporation/ partnership/limited partnership/]_____ ("Granting Owner" and "Owner") in favor of _____ LAND TRUST, a _____ nonprofit corporation ("Land Trust"). This Complete Amendment and Restatement of Deed of Conservation Easement fully amends, restates, and replaces the Deed of Conservation Easement executed on _____ and recorded in the _____ County Official Records, Volume ____, Pages ____ ("Prior Easement"). All differences between the Prior Easement and this Easement are purposeful and reflect the [Granting] Owner's intent.

Commentary. Even if an amendment can be recorded affecting a single paragraph, the better approach for amendments of significance is to supplant the existing easement with a new one. A simple amendment is more easily missed in a title search and more easily forgotten by owner and land trust. Use of a complete restatement may also be important to establish a donor's right to an income tax deduction if the amendment includes an additional donation of land or rights. If a short form amendment is used, be sure to include an express confirmation and reaffirmation of the unaffected terms in the original easement.

RECITALS

Commentary. Recitals are critical elements of any easement that identify the Property and parties, provide factual background, establish public benefit and other facts, to set out the intent of the parties, and to identify the baseline. Recitals or "Whereas" clauses are typically numbered or lettered. The following bare minimum format needs to be supplemented with significant factual information relating to the specific land, identified public benefits and conservation values, and so on.

Identification of Granting Owner, Land Trust and others

The Granting Owner is the sole owner in fee simple of that certain real property

containing a total ___ acres, more or less, in _____ County, _____, commonly known as _____[street address]_____, designated as _____ County Assessor's Parcel Number[s] _____ on the _____ County Assessor's Maps currently in effect, and more particularly described in Exhibit A attached hereto and incorporated herein by this reference (the "**Property**"). The term **"Owner"** refers to both the Granting Owner and to all subsequent Owners no matter how they may come to own part or all of the Property. Land Trust is the holder and owner of the Easement conveyed with this Deed.

> **Commentary.** This paragraph will need to be revised to correspond to the facts and identify all the participants in the specific easement. The paragraph may also include information on any funders or other third parties that are interested. Each time an exhibit is identified, add it to the list of exhibits at the end so it is not forgotten when the final document is prepared for signing and recordation. Although arguably redundant given the usual boilerplate provisions, an early definition of "Owner" can reduce the risk of a credible claim of misunderstanding by a subsequent owner.

General information about the Property, introduction of any Zones

The Property consists of ___ acres of [___prairie/forest/grassland/marsh/mixed woodlands___] located in the _____ region of the State of _____.

The Property consists of ___ zones, a __ acre portion of the property that will be kept forever wild/in a natural state ("the Forever Wild Zone"["Natural Zone"]) further described in paragraph __ and Exhibit __, a __ acre portion of the property that will used for Commercial Agriculture ("the Agricultural Zone") further described in paragraph __ and Exhibit __, and a __ acre portion of the property that can be further developed ("the Development Zone") further described in paragraph __ and Exhibit __.]

> **Commentary.** Not all easements need to define zones. If one or more zones are defined, it is essential to use the defined terms consistently and carefully. Errors can easily slip in during the editing and negotiation process, so a final check needs to be made before signing to ensure that the term "Property" and the specific zones are correctly used throughout the document. If defined zones are used, select terms that make sense. Forever Wild Zone may be inappropriate for land that has been heavily impacted by human use so that Natural Zone may be more appropriate. The word "Zone" is not magic, so one can refer to the Natural Area.

That portion of the Property covered and affected by paragraph __ of this Easement is referred to herein as "_____Easement Area___."

> **Commentary.** Rather than or in addition to using one or more zones, it may make sense to have the easement restrictions apply only to a portion of the Property. If the easement covers less than the entire parcel, be sure to provide for access for monitoring through the other parts of the parcel. Moreover, it may be important to address the entire Property rather than simply the Easement Area in certain of the easement paragraphs (for example, the grant of access for monitoring). Thus, one cannot use a global search and replace.

Factual recitals to establish public benefit, satisfaction of section 170(h)

Commentary. Naturally, these recitals are highly targeted to the specific land and environs and the specific Conservation Values.

Relatively Natural Habitat [§ 1.170A-14(d)(3)].

Open Space [§ 1.170A-14(d)(4)] with scenic enjoyment, agriculture, significant public benefit.

Recreation or Education [§ 1.170A-14(d)(2)].

Historical [§ 1.170A-14(d)(5)].

State Law and other governmental policy

This is not the place to be terse. Full exposition of relevant information in the recitals supports the land trust's decision to accept the easement, establishes the public benefits it serves, aids in future enforcement and serves a variety of similar purposes. IRS attorneys have noted how important it is to be quite specific and use extensive recitals to illustrate what is important about this particular property and why this particular easement qualifies. By definition, these factual recitals are site specific. They can best be prepared in conjunction with the baseline documentation, following on-site examination of the land and its surroundings and appropriate research. Substantial discussion of recitals and sample recitals can be found in *The Conservation Easement Handbook*, by Elizabeth Byers and Karin Marchetti Ponte (2005) (The Trust for Public Land and The Land Trust Alliance).

Individually and collectively, these _____ values comprise the "Conservation Values" of the Property.

Baseline

The specific Conservation Values of the Property, including the natural, ecological, scenic, agricultural, open space, and other characteristics of the Property, and its current use and state of improvement, are documented in an inventory of relevant features of the Property prepared by Land Trust with the cooperation of Granting Owner dated _____ on file at the offices of Land Trust and incorporated herein by this reference ("Baseline Documentation"), consisting of field reports, maps, photographs, and other documentation that the Parties all agree provide, collectively, an accurate representation of the Property at the time of this grant and that are intended to serve as an objective, though nonexclusive, information baseline for monitoring compliance with this Easement. The Baseline Documentation may be used by Land Trust to establish that a change in the use or character of the Property has occurred, but the existence of the Baseline Documentation shall not preclude Land Trust's use of other evidence to establish the condition of the Property as of the date of this Easement. The Parties further agree that, if a controversy arises with respect to the condition of the Property or a particular Conservation Value thereof, the Parties shall not be foreclosed from utilizing any other relevant document, survey, or report to assist in resolution of the controversy.

Commentary. See Land Trust *Standards and Practices* 11B; http://www.landtrustaccreditation.org/pdf/11BGuidanceDocument.pdf. Some land trusts prepare a short summary of the critical baseline information and record it as an exhibit to the easement. Some record the entire baseline. Recordation of at least the critical information ensures that any subsequent purchaser cannot claim ignorance because recorded documents give constructive notice of their contents. Moreover, recordation of at least the essential maps and information provides a duplicate that should survive loss of the original and be admissible in court.

OR

Granting Owner and Land Trust have signed for identification purposes the report (the "Baseline Documentation"), to be kept on file at the principal office of Land Trust, that contains an original, full-size version of the survey or other graphic depiction of the Property and other information sufficient to identify on the ground the protected areas identified in this easement, that describes existing improvements, that identifies the Conservation Values of the Property, and that includes, among other information, photographs depicting existing conditions of the Property as of the date of this Easement.

OR

Documentation of Present Conditions. Pursuant to §1.170A-14(g)(5) of the Treasury Regulations and in order to document the condition of the Property as of the date of this Deed, a report has been prepared by _____and dated _____("Present Conditions Report"). The Present Conditions Report contains a natural resources inventory and also documents the Conservation Values and the characteristics, current use, and status of improvements on and development of the Property. The Present Conditions Report is acknowledged by Granting Owner and Land Trust as an accurate representation of the Property at the time of the transfer. The Present Conditions Report has been provided to both Parties and will be used by Land Trust to assure that any future changes in the use of the Property will be consistent with this Easement. However, the Present Conditions Report is not intended to preclude the use of other evidence to establish the condition of the Property as of the date of this Easement.

Commentary. Be sure "Parties" is a defined term. Use Present Conditions Report or Baseline Documentation consistently.

OR

The parties acknowledge that Exhibits A through E (collectively "Baseline Documentation") reflect the legal description of the Property, existing uses, location, Conservation Values and Structures, Buildings, and Dwelling Units on the Property as of the date of this Easement. Owner hereby acknowledges that the attached Exhibits are sufficient to establish the condition of the Property at the time of the granting of this Easement. All Exhibits are hereby made a part of this Easement:

- Exhibit A: Legal description and boundary description consisting of ____ pages are attached hereto and made a part hereof.

- Exhibit B: A description of the Conservation Values is attached hereto and made a part hereof consisting of ____ pages.
- Exhibit C: An inventory of existing structures consisting of ____ pages is attached hereto and made a part hereof.
- Exhibit D: Color Digital Images of the Property are not recorded herewith but are kept on file at the principal office of Land Trust and are incorporated into this Easement as though attached hereto and made a part hereof. A list of the image numbers, vantage points, and image descriptions is recorded herewith. Exhibit D consists of ____ color digital images and ____ pages.
- Exhibit E: __[Two]_____ aerial photographs of the Property are recorded herewith. An additional _____ aerial photographs of the Property are not recorded herewith but kept on file at the principal office of Land Trust and are incorporated into this Easement as though attached hereto and made a part hereof.
- Exhibit F: A map showing the approximate location of attributes and Structures on the Property is attached hereto, consisting of 1 page.

Commentary. Custom in some parts of the U.S. is to record some or all of the foregoing portions of the baseline documentation. Recordation simplifies some aspects of later admissibility of the baseline into evidence and definitely ensures that later owners have notice of the recorded information. Recordation may add significant expense, however, and some documents, maps and photographs are not easily transformed into suitable size and form for recordation. Thus, the full baseline documentation will normally include additional documents even if portions of the baseline are recorded.

Granting Owner's intent

Granting Owner intends that the Conservation Values of the Property be preserved and maintained by permitting only those uses of the Property that do not significantly impair or interfere with the Conservation Values. Granting Owner intends to make a charitable gift of the property interest conveyed by this Easement to Land Trust for the exclusive purpose of assuring that, under Land Trust's perpetual stewardship, the [open space character and agricultural, natural and ecological and scenic qualities] of the Property will be conserved and maintained forever.

Granting Owner and Land Trust recognize that changes in economic conditions, in agricultural technologies, in accepted farm and ranch management practices, and in Owner's situation may result in an evolution of Agricultural Uses of the Property, provided such uses are consistent with this Easement.

Commentary. This paragraph uses the defined term "Agricultural Uses" and should only be used in an easement that defines and uses that term. Additional provisions on economic change appear in the body of the Easement.

OR

Granting Owner and Land Trust recognize that changes in economic conditions, in agricultural and forestry technologies, in generally accepted farm, ranch and forest management practices, and in the situation of Owner may result in an evolution of agricultural, silvicultural, and other uses of the Property, and such uses are permitted provided they are and remain consistent with the conservation purposes of this Easement and the protection of the Conservation Values in perpetuity.

Granting Owner intends that the Conservation Values of the Property be preserved and maintained by the continuation of land uses that do not significantly impair or interfere with those Conservation Values, with the overall goal and intent that the Property be maintained in as natural a state as possible subject to the permissible uses set forth herein, creating a charitable trust to benefit the people of the [County of _____ and the] State of _____.

> **Commentary.** Omitting the final words that affirmatively state that the Easement creates a charitable trust will not prevent a charitable trust from being created. See, e.g., Uniform Conservation Easement Act, §3 cmt. ("because conservation easements are conveyed to governmental bodies and charitable organizations to be held and enforced for a specific public or charitable purpose—i.e., the protection of the land encumbered by the easement for one or more conservation or preservation purposes—the existing case and statute law of adopting states as it relates to the enforcement of charitable trusts should apply to conservation easements"); Restatement (3d) of Property: Servitudes §7.11 (2000) (recommending that modification and termination of conservation easements be governed by a special set of rules based on the charitable trust doctrine of cy pres); Restatement (3d) of Trusts §28 cmt. a (2003); Restatement (2d) of Trusts §348.1 cmt. f (1959) Uniform Trust Code §414 cmt; Amending Conservation Easements: Evolving Practices and Legal Principles (Land Trust Alliance 2007); McLaughlin & Weeks, In Defense of Conservation Easements: A Response to The End of Perpetuity, 9 Wyo. L. Rev. 1 (2009).

If one or more of the purposes of this Easement may no longer be accomplished, such failure of purpose shall not be deemed sufficient cause to terminate the entire Easement as long as any other purpose of the Easement may be accomplished.

> **Commentary.** This paragraph could be included elsewhere in the easement, with the paragraphs on changes over time or on easement termination. Obviously, the paragraph does not work if there is only a single purpose to the easement. Most easements, however, can be drafted to serve multiple purposes.

Granting Owner further intends, as owner of the Property, to convey to Land Trust the monitoring and enforcement rights to preserve and protect the Conservation Values of the Property in perpetuity.

To effectuate the intentions of the Parties, Granting Owner intends to give to Land Trust a perpetual and irrevocable Conservation Easement over the Property, to create certain restrictive covenants and equitable servitudes for the benefit of Land Trust in gross that will bind and run with the Property, and to extinguish irrevocably and perpetually the right to develop the Property, except as expressly permitted in this Easement.

Land Trust's intent/qualification

Land Trust is a _____ publicly supported nonprofit organization within the meaning of ___[state statute]_____ and is a tax exempt "qualified conservation organization" within the meaning of sections 501(c)(3) and 170(h) of the Internal Revenue Code. Land Trust's primary purpose is the preservation and protection of land in its natural, scenic, [historical,]agricultural, forested, and/or open space condition. Land Trust agrees by accepting this grant to honor the intentions of the Granting Owner stated herein and to preserve and protect in perpetuity the Conservation Values of the Property for the benefit of this generation and the generations to come.

> **Commentary.** A state enabling statute may define "holder" in a particular way or impose certain requirements that should be tracked in recital language.

OR

Land Trust has received and there remains in full force and effect a determination letter from the Internal Revenue Service, dated _____, a copy of which has been provided to Owner, to the effect that Land Trust is a "publicly-supported" organization described in sections 509(a)(1) and 170(b)(1)(A)(vi) of the Internal Revenue Code and is not a private foundation within the meaning of section 509(a) of the Code.

OR

Land Trust is qualified to hold conservation easements under the laws of the United States and the State of _____.

AGREEMENT

1. Grant and Acceptance of Easement. For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and pursuant to the laws of the United States and the State of _____, including _____ sections ____ et seq., Granting Owner hereby voluntarily grants and conveys to Land Trust a Conservation Easement in perpetuity over the Property.

> **Commentary.** Reference to the consideration for the easement may be required in some States as a matter of law. Donated easements do not involve an exchange of traditional consideration for the easement, so the language is potentially or actually inappropriate. The wording below avoids the issue and may be preferable.

OR

1. Grant and Acceptance of Easement. In consideration of the mutual covenants, terms, conditions, and restrictions contained herein, and pursuant to _____[state enabling statute]_____ and other applicable law, Granting Owner hereby voluntarily grants and conveys to Land Trust a Conservation Easement in perpetuity over the Property of the nature and character and to the extent hereinafter set forth, and Land Trust hereby accepts that grant and conveyance.

2. Purposes. The purposes of this Easement are to preserve and protect the

Conservation Values of the Property as identified in the recitals set forth above and in the Baseline Documentation, to prevent any use or condition of the Property that will significantly impair or interfere with the Conservation Values, and to retain the Property in its current condition in perpetuity. Granting Owner intends that this Easement will confine the use of the Property to activities that are consistent with the purposes of this Easement.

OR

2. **Purposes.** Granting Owner grants this Easement to Land Trust for the purpose of assuring that, under Land Trust's perpetual stewardship, [the agricultural productive capacity/ scenic beauty and] open space character of the Property will be conserved and maintained forever and that uses of the land that are inconsistent with these conservation purposes will be prevented or corrected. [The Parties agree, however, that the current uses of, and improvements to, the Property[, as described in the Baseline Documentation,] are consistent with the conservation purposes of [or are expressly permitted by] this Easement.]

OR

2. **Purposes.** The purposes of this Easement are to ensure that the Property will be retained forever in its natural, restored, or enhanced condition as contemplated by this Easement [and the Management Plan] and to prevent any use of the Property that will impair or interfere with the Conservation Values of the Property. Granting Owner intends that this Easement will confine the use of the Property to activities that are consistent with such purposes, including, without limitation, those involving the preservation, restoration and enhancement of native species and their habitats implemented in accordance with this Easement [and the Management Plan].

AND?

In particular, Granting Owner's primary purposes with this Easement are to protect the Property's natural and open space values by prohibiting_____ on the Property, prohibiting commercial agriculture on the Property, prohibiting commercial and industrial uses of the Property, and prohibiting the subdivision of the Property.

> **Commentary.** There are several sample options here, but all must be revised to fit the specific facts.

OR

In particular, Granting Owner's primary purposes with this Easement are to protect the Property's agricultural values by prohibiting _____ on the Property, prohibiting subdivision of the Property, and prohibiting the construction of any [additional] residence or other buildings on the Property.

OR

In particular, Granting Owner's primary purpose with this Easement is to enable the Property to remain in productive agricultural use by preventing uses of the Property that will impair or interfere with its agricultural productive capacity, its soils, and its agricultural character, values, and utility. To the extent that the preservation of the

other Conservation Values of the Property are consistent with such use, it is within the purpose of this Easement to protect those values.

> **Commentary.** This provision provides a ranking of purposes, enabling the easement to be applied when its paragraphs set out partially conflicting requirements. Some land trusts deliberately avoid setting out a ranking of conservation values. Certainly, a ranking would not be necessary in every easement, but there are circumstances in which a ranking, with or without qualifications, can prevent difficult internal conflicts within an easement that protects multiple conservation values.

AND?

In granting this Easement, Granting Owner has considered the fact that any use of the Property that is expressly prohibited by this Easement, or any other use as determined to be inconsistent with the purpose of this Easement, may become greatly more economically valuable than permitted uses, or that neighboring properties may in the future be put entirely to uses that are not permitted in this Easement. Granting Owner believes that any such changes will increase the benefit to the public of the continuation of this Easement. Both Granting Owner and Land Trust intend that any changes shall not be deemed to be circumstances justifying the termination or extinguishment of this Easement. In addition, the inability to carry on any or all of the permitted uses, or the unprofitability of doing so, shall not impair the validity of this Easement or be considered grounds for its termination or extinguishment.

> **Commentary.** The "and" and "or" options are paragraphs that might be used to add substance to the purposes clause. The specific circumstances of the donor, land trust and land will determine the level of detail and the content. This provision could also go in the recitals or another location.

3. Rights of Land Trust. To accomplish the purposes of this Easement, the following rights are expressly conveyed to Land Trust by Granting Owner:

(1) Protection—To identify, preserve and protect the Conservation Values of the Property.

(2) Entry—To enter upon the Property[, or to authorize any third party to enter upon the Property,] at reasonable times in order to monitor compliance with, inspect, observe, document (including but not limited to photographs, maps, GPS), and otherwise determine and enforce this Easement, using the right of access over any and all roads owned by Owner and any other access rights or easements permitting the entry by Owner or Land Trust to the Property; provided that, except in cases in which Land Trust determines that immediate entry is required to prevent, terminate, or mitigate a violation of this Easement, such entry shall be upon prior reasonable notice to Owner, and Land Trust shall not unreasonably interfere with Owner's use and quiet enjoyment of the Property.

> **Commentary.** If state law would permit any argument that the land trust's right of entry did not extend to its agents and contractors, then this paragraph or the Successors and Assigns clause in paragraph 15 should be expanded to address the issue. Also

consider whether to provide expressly for the land trust to be entitled to authorize law enforcement to enter the Property. Finally, some owners will resist the right of "immediate entry to prevent, terminate, or mitigate a violation" but that right may be essential to protect the conservation values. Such owners may be satisfied by addition of the word "rare" before the word "cases." See Land Trust *Standards and Practices* 11C.

OR

(2) Entry—To enter upon the Property to inspect, observe, document (including but not limited to photographs, maps, GPS), and study the Property for the purposes of (i) identifying the current uses and practices thereon, (ii) monitoring the uses and practices regarding the Property to determine whether they are consistent with this Easement, and (iii) otherwise enforcing this Easement. Except in cases where Land Trust reasonably determines that immediate entry is required to prevent, terminate, or mitigate a violation of this Easement, such entry shall be permitted no less than once a year at reasonable times, upon 72-hour prior notice to Owner, and shall be made in a manner that will not unreasonably interfere with the proper uses and quiet enjoyment of the Property. [Each entry shall be for only so long a duration as is reasonably necessary to achieve the purposes of this paragraph].

Commentary. Alter the "no less than once a year" language if there are reserved rights that may require more frequent monitoring, such as reserved rights to construct additional structures. Consider changing 72-hour notice to 24-hour notice or to reasonable prior notice.

OR

(2/3) Entry and Enforcement—To manage its responsibilities as holder of this Easement in order to uphold the purposes of this Easement, including, but not limited to, annual monitoring, such additional monitoring as circumstances may require, record keeping, and enforcement, for the purpose of preserving the Property's Conservation Values[, agricultural productive capacity and open space character] in perpetuity. Failure of Land Trust to carry out these responsibilities shall not impair the validity of this Easement or limit its enforceability in any way. With reasonable advance notice (except in the event of an emergency circumstance or prevention of a threatened breach), Land Trust shall have the right to enter upon, inspect, observe, monitor and evaluate the Property to identify the current condition of, and uses and practices on the Property and to determine whether the condition, uses and practices are consistent with this Easement.

(3) Enforcement—To prevent or contain any activity on or use of the Property that is inconsistent with the purposes of this Easement[, to require that Owner's reserved rights be exercised in a manner that avoids unnecessary harm to the Conservation Values of the Property protected by this Easement,] and to require the restoration of such areas or features of the Property as may be damaged by any inconsistent activity or use, pursuant to the remedies set forth below.

OR

(3) Enforcement—To enforce the rights herein granted; to prevent or stop, by any legal means, any activity or use of the Property that, in the reasonable judgment of Land Trust, is inconsistent with this Easement; and to require restoration, to the condition that existed prior to such activities, of such areas or features as may have been damaged by such activities.

(4) Access—To use any recorded or prescriptive easement that now or in the future grants lawful access to or across the Property for any of the foregoing purposes.

> **Commentary.** This language is appropriate if the easement covers the entire parcel. If not, reword the paragraph to ensure that there is access across the excluded land to reach the easement land. The easement will have to apply to the entire parcel at least to the extent of granting access rights, and it may be necessary to obtain additional recorded access rights as well.

OR

(4) Assignment of Owner's Access Rights—To use any and all access easements and rights-of-way, whether recorded or not, over the Property of others that individually or together provide Owner with legal, physical and other access to the Property. Owner shall execute any additional documents as may be necessary to evidence this assignment.

> **Commentary.** As the Owner buys and sells land and as ownership of adjacent land changes, the scope of this right will change. At a minimum, Land Trust needs at least one recorded access to the easement land. Larger properties may need additional recorded access to ensure proper monitoring.

OR

(4) Assignment of Owner's Access Rights—In order to enable this Easement to be adequately monitored and enforced by Land Trust, Owner hereby irrevocably assigns to Land Trust the non-exclusive right to use any and all access easements and rights-of-way, whether recorded or not, over the Property or the property of others that individually or together provide Owner with legal, physical and other access to the Property. Owner further agrees to execute any additional documents necessary to evidence this assignment.

(5) Signage—To erect and maintain signs or other appropriate markers in one or more prominent locations on the Property acceptable to Owner, visible from a public road [or along boundaries], bearing information indicating that the Property is protected by Land Trust. The wording of the information shall be determined by Land Trust but shall clearly indicate that the Property is privately owned and not open to the public. Land Trust shall be responsible for the costs of erecting and maintaining such signs or markers.

OR

(5) Signage—To erect and maintain small unlighted signs or other appropriate markers visible from public vantage points and along boundary lines to identify Land Trust, inform the public that the Property is protected by this Easement

and identify activities prohibited by the Easement.

Commentary. When appropriate, consider adding "advise the public that hunting, trapping, and other uses restricted by this Easement are prohibited" and/or a request for the public to contact Land Trust to report violations to the permitted communications.

(6) Interpretation—To interpret this Easement, apply this Easement to factual conditions on or about the Property, respond to requests for information from persons having an interest in this Easement or the Property, and apply this Easement to changes occurring or proposed within the Property.

Commentary. This provision may be partially duplicative of some of the boilerplate provisions, but it is broader in scope and affirmatively acknowledges that changes will occur over time and easement provisions will need to be interpreted.

(7) Protection—To require that all mineral, air and water rights as Land Trust deems necessary to preserve and protect the biological resources and Conservation Values of the Property shall remain a part of and be put to beneficial use upon the Property, consistent with the purposes of this Easement.

Commentary. This provision may be unnecessary if the prohibitions against subdivision are broadly worded or other prohibitions cover this point.

(8) Reservation of Forest Carbon Services—To hold, market, and transfer any and all rights related to the Forest Carbon, including but not limited to mitigation credits or offsets, now present or existing in the future, and the right to report such mitigation credits or offsets to any relevant public or private regulatory/oversight body or registry whether pursuant to a voluntary system or created by local, federal, or international law or regulation, which rights arise from or are generated by or from the Property on or after the date of this Easement (collectively, the "**Forest Carbon Services**"). The Forest Carbon Services retained hereunder shall specifically include, but shall not be limited to, the right to hold, reserve, report, market or retire any greenhouse gas mitigation credits or offsets that may be generated upon the Property, and other types of mitigation credits or offsets that arise from the production of Forest Carbon. Land Trust shall have the absolute discretion in determining the purchaser(s) and/or recipient(s) of any Forest Carbon Services and the consideration for such Forest Carbon Services shall inure to the sole benefit of Land Trust.

Commentary. Consider whether Land Trust or owner should receive the consideration. If the owner, then this provision should appear later in the easement. If Land Trust, then some of the similar later provisions might also be moved here. If the various examples below that specifically relate to climate change grant rights to Land Trust, they should be included in this paragraph or otherwise set out unambiguously..

(9) Additional Rights—To exercise such additional rights as may be reasonably necessary to effectuate the purposes of this Easement.

Commentary. This "elastic clause" is quite broad and accords Land Trust significant protection against an unduly restrictive interpretation of other rights paragraphs. Many other types of rights might be included in the rights paragraph if appropriate.

4. Prohibitions, Restrictions and Reserved Rights. The Property shall be used in a manner consistent with this Easement. [The Property may be used as affirmatively permitted in this Easement or in accordance with the restrictions and prohibitions set forth herein.] Any activity on or use of the Property that is inconsistent with the purposes of this Easement is prohibited. **[All uses are prohibited, except for those expressly allowed by this Easement.]** Granting Owner reserves all rights accruing from Granting Owner's ownership of the Property, including the right to engage in, or to permit or invite others to engage in, all uses of the Property that are permitted herein or are neither expressly prohibited herein nor inconsistent with the purposes of this Easement. Ownership rights include the right to sell, lease, or otherwise transfer the Property to anyone Owner chooses, as well as the right to privacy and the right to exclude any member of the public from trespassing on the Property. Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited, expressly permitted, or qualifiedly permitted as set forth. Nothing in this Easement relieves Owner of any obligation or restriction on the use of the Property imposed by federal, state, and local laws, regulations and requirements.

Commentary. In some parts of the country, donors may resist the prohibited "unless expressly permitted" option; it is most likely to be acceptable for forever wild easements. It is essential that the easement be clear whether everything is permitted except the prohibited acts or everything is forbidden except the permitted acts. Any ambiguity opens the door to potential disputes.

(1) Extinguishment of Development Rights. Except as otherwise reserved to Owner in this Easement, all development rights appurtenant to the Property are hereby released, terminated and extinguished, and development rights may not be used on or transferred to any portion of the Property as it now or hereafter may be bounded or described, or to any other property adjacent or otherwise, or used for the purpose of calculating permissible lot yield of the Property or any other property. This Easement shall not create any development rights.

OR

(1) Extinguishment of Development Rights. Granting Owner hereby grants to Land Trust all development rights except as specifically reserved in this Easement, that were previously, are now or hereafter allocated to, implied, reserved, appurtenant to, or inherent in the Property, and the Parties agree that such rights are released, terminated, and extinguished, and may not be used on or transferred to any portion of the Property as it now or later may be bounded or described, or to any other property adjacent or otherwise, or used for the purpose of calculating permissible lot yield of the Property or any other property. This Easement shall not create any development rights.

(2) Subdivision. The division, subdivision, de facto subdivision, or partition

of the Property, including transfer of development rights, whether by physical, legal, or any other process, and including the lease of any portion less than one hundred percent (100%) of the Property for a term in excess of twenty (20) years is prohibited.

> **Commentary.** There are multiple reasons to prohibit subdivision, including avoiding the enforcement problems and additional monitoring expenses arising from additional owners, maintaining sufficient acreage in single ownership to support agricultural uses, and avoiding fragmentation of habitat. Especially if use of certain parcels is severely limited, those parcels should not be sold separately because their severe restrictions would increase the risk that a court might terminate the easement. Consider, however, whether to permit subdivision for the purpose of transferring a portion of the Property to an appropriate organization for use for park, nature preserve, public trail or other conservation purposes. Some farm leases are for longer than 20 years and may be for less than the entire Property, so that language may need to be adjusted.

OR

(2) Subdivision. The legal or de facto subdivision of the Property or use of the Property to accomplish any legal or de facto subdivision of any other existing assessor's parcel or to create a separate and legal parcel from any other existing assessor's parcel is prohibited, including, but not limited to, any such subdivisions or establishment of separate legal parcels by (i) certificates of compliance, (ii) "separate for assessment purposes" designations or (iii) lot line adjustments.

OR

(2) Subdivision. Owner agrees the Property has ____ existing legal parcel(s). Owner will not apply for or otherwise seek recognition of additional legal parcels within the Property. Owner shall continue to maintain the legal parcels comprising the Property, and all interests therein, under common ownership, as though a single legal parcel. If merger of parcels is permitted in the future, Owner is entitled to merge one or more of the parcels.

> **Commentary:** This paragraph and the next are for properties consisting of multiple parcels that cannot be formally merged for some reason. Formal merger may reduce property taxes, and formal merger is typically preferable because the county will then enforce the prohibition on subdivision.

OR

(2) Subdivision. The Property is currently comprised of [multiple] [__number__] legal parcels, all owned by Granting Owner. Unless otherwise permitted by Land Trust, Owner shall maintain all of the parcels comprising the Property, and all interests therein, under common ownership, as though a single legal parcel in perpetuity. Subdivision of any of the parcels, recording of a subdivision plan, partition of any of the parcels, certificates of compliance, lot line adjustments or any attempt to divide any of said parcels into two or more legal parcels without prior approval of Land Trust as provided below is prohibited.

> **Commentary:** This paragraph is for properties consisting of multiple parcels that cannot be formally merged for some reason.

AND/OR

(2) Lot Line Adjustments. Notwithstanding the foregoing, Granting Owner [Owner] may undertake a [single] lot line adjustment with the adjacent parcel currently designated as _____ for the purposes of _____[e.g., providing access to the Property]_____. Granting Owner [Owner] may also undertake lot line adjustments with any adjacent parcels provided that (a) the current total acreage of the Property shall not be decreased, and (b) the Conservation Values of the Property shall be further conserved or enhanced by the lot-line adjustment, (c) no new development rights are created, and (d) prior approval has been obtained by Land Trust as set forth below.

> **Commentary.** Grantor may not wish to give the right to a later owner. Nail down the location of the lot line adjustment if possible with maps, reference to the northeast corner of the Property, or other specific facts on the ground. The conservation values of the adjacent properties may/should also be considered in any lot line adjustment.

OR

(2) Lot Line Adjustments. Lot line adjustment may be permitted solely with the prior approval of Land Trust as set forth below[[only] for purposes of maintaining or enhancing agricultural practices or productivity on the Property]. [Granting Owner] shall take no steps towards lot line adjustment unless and until Land Trust approves the request.

(3) Structures. Placement, construction, installation, reconstruction or expansion of any structures, buildings, additional roads or access routes, or other manmade improvement of any kind (including, without limitation, buildings, fences, parking lots, billboards, signs, mobile homes, modular structures, caves, towers) is prohibited, except as expressly permitted in this paragraph or paragraph ___. A structure includes anything constructed or erected, the use of which requires permanent location on the ground or attachment to something having a permanent location on the ground. Before undertaking any construction, erection, installation or placement that requires advance approval, Owner shall notify Land Trust and obtain prior written approval from Land Trust as required below. "Improvement" shall not refer to trees, vines, or other living improvements planted for agricultural [or landscaping] purposes, whether or not stakes are required to support the plants, nor shall it refer to minor irrigation improvements necessary or desirable to irrigate the Property for agricultural purposes, all of which may be made without the approval of Land Trust. "Minor irrigation improvements" are those that are either smaller than _____ or seasonal [temporary] in nature and that do not significantly affect Conservation Values.

> **Commentary.** The definition of "structure" may need to vary. The key is to address all possible structures, identify all permitted structures and forbid all other structures. Define "temporary" if that term is used. If replacement and/or expansion of a structure is permitted, then the size and characteristics of the structure need to be well defined in the Easement and the baseline. If replacement is not permitted, then the Easement should address restoration of the site when the structure is no longer to be used. Some provisions may apply to all structures—such as "Owner shall maintain the traditional, rustic and primitive appearance and character of the existing buildings and their

setting."—Absent very good documentation in the baseline, provisions such as this are difficult to enforce and may present more problems than benefits.

(a)(1) Fences–Existing fences may be repaired and replaced[, and new fences may be built] anywhere on the Property for purposes of reasonable and customary agricultural management and protection of crops, livestock and wildlife, and for security of farm produce, livestock, equipment, and improvements on the Property, and to define boundaries [without any further approval of Land Trust].

> **Commentary.** Approval might be required for new fencing but not for repair and replacement of existing fencing in some cases, or approval might be required for fencing outside the Development Zone. Restrictions on use of mesh fencing may be appropriate to preserve animal corridors. Boundary fencing may be treated separately or differently, as may fencing that is visible from public roads, parks and other public places. Any property with a residence will normally need some fencing rights for household gardens, dog runs and the like. Depending on the visibility of permitted fencing and the character of the easement, consider height restrictions, scenic detriment, impact on visibility of historic structures or other things, loss of open space character, and the like. Any decision on fencing is highly fact specific.

OR

(a)(1) Fences–Maintenance of existing boundary fencing and installation of new boundary fencing are permitted [so long as the fencing does not inhibit the free movement of deer and other native wildlife into, out of, and within the Property]. [Replacement of existing boundary fencing and any new boundary fencing by Owner shall be with fencing designed to minimize harm to, and allow the passage of, [native] wildlife. Fencing material shall be in a form that will not substantially impede the movement of wildlife, air circulation, or other natural conditions or interfere with any scenic conservation values intended to be protected by this Easement.]

OR

(a)(1) Fences–Owner may repair, replace or install fencing as desired within the Development Zone. Any installation of fencing outside of the Development Zone is prohibited other than to protect endangered or threatened species when approved by Land Trust as not harmful to the Property or [native] plants and animals thereon. Despite the foregoing, Owner may install fencing and gates on or as close as reasonably practicable to Property boundaries and at Property entrance roads for security purposes.

OR

(a)(1) Fences–Any installation of mesh fencing within the Property is prohibited other than (1) to enclose areas for short periods of time for research purposes, (2) to protect endangered or threatened species, (3) to contain up to ___ domestic fowl, (4) to protect a household garden from animal predation, and for like purposes[, all as approved by Land Trust as not harmful to the Property or

plants and animals thereon].

Commentary. Consider whether Trust approval is necessary for any or all of these fences or gates, depending on size, visibility, harm to natural areas, habitat, wildlife corridors or other features. Consider whether to limit the location of certain fences to a Development Zone or to limit the prohibition to the portion of the Property that is outside the Development Zone. Consider whether to limit the height of any or all fences.

(a)(2) Gates—Gates are permitted in any permitted fence but may not exceed ____ by ____ feet.

Commentary. Consider limiting the lighting, signage, number, and type of construction, especially for gates visible to the public.

OR

(a)(2) Gates—Gates are permitted at Property boundaries but may not exceed ____ by ____ feet. Cattle guards may be placed at _____. Gates may also be placed in the fence around the household garden and at _____[and at such other locations as Owner and Land Trust may agree].

Commentary. Consider limiting the lighting, signage, number, and type of construction, especially for gates visible to the public.

(b) Residential Use Prohibited–Any residential use of, or activity on, the Property is prohibited.

Commentary. Be sure to include detailed recitals supporting intent to prohibit all residential use and protective provisions such as paragraphs affirmatively acknowledging that economic use of the land has been greatly diminished. Courts are reluctant to enforce severe prohibitions of this sort, so inclusion of self-serving paragraphs that make the grantor's intent very clear are valuable. Especially with an elderly donor, consider making a videotape of the donor explaining the prohibition and the reasons for it.

OR

(b) Permitted Residential Use–The following residential use is permitted:

(b)(1) Existing Single-Family Residential Dwelling—The existing single-family dwelling depicted on the map in Exhibit __ may be repaired[, reasonably enlarged] or replaced at the depicted location entirely within the Development Zone shown in Exhibit __ without further approval of Land Trust [so long as the dwelling does not exceed ____ square feet measured _____/so long as the structure is no taller than ____ feet measured from ground level at its highest point]. No other residential structures may be constructed or placed on the Property [except for agricultural employee housing as permitted below].

Commentary. Consider imposing other restrictions depending on location, visibility and other circumstances. Identify and address appurtenant structures (garage, shed, swimming pool and cabana, gazebo, decks, patios, and so on)

specifically or generally as appropriate to the Property. Consider requiring the residence to be relocated to a designated location more protective of Conservation Values if the residence is destroyed or so severely damaged as not to be repairable. Consider whether to make "residential uses" a defined term. Many model easements use 35 feet as the maximum height, but the height limit should consider the specific location. If the term "reasonably enlarged" is used, it must be defined. All of these options on size, height, and the like need to be negotiated and better defined based on the specific needs of the individual land.

OR

(b)(1) Permitted Residential Uses—Owner reserves the right to use structures already existing on the Property at the time this Easement is executed for residential or recreational use, as long as such use is not inconsistent with the purposes of this Easement. Specifically, Owner reserves the rights to occupy, repair, or otherwise use the residential structure [and other existing buildings] located on the Property at the date of this Easement. This includes the right to maintain, renovate or replace the same residential structure to a maximum height of one (1) story above the natural ground level and to a maximum "footprint" area of one and a half times its existing "footprint" area as of the effective date of this Easement.

OR

(b)(2) New Single-Family Residential Dwelling—No more than one new single-family residential dwelling, together with reasonable appurtenances such as garages and sheds, may be built on the Property. [This dwelling and appurtenant structures shall be located in the Development Zone indicated on Exhibit B. OR This dwelling shall be located where indicated on Exhibit B, and appurtenant structures shall be located no more than __[250]__ feet from this dwelling.] Owner may relinquish the right to construct the new residential dwelling referred to herein at any time.

Commentary. Consider defining and limiting the number, nature, location and size of reasonable appurtenances more specifically. There is less need for specificity when the Development Zone is not visible to the public and when the Zone is very small. If the Development Zone is not defined, use the Adjustable Zone paragraph. Be sure to address the placement and character of the road to this new residence and its water and utilities and other needs. Consider adding some of the (b)(1) restrictions to govern the new residence. Define the location of any new residence if at all possible to ensure that it causes as little harm to conservation values as possible.

AND/OR

(b)(2) Guest Houses/Granny Units—No guest house or granny unit or similar residential use is permitted.

Commentary. Alternatively, a single guest house or granny unit (or perhaps more than one) might be permitted. If so, all the issues of placement, size, nature and so on that apply to the principal residence apply to the guest house or granny unit.

OR

(b)(2) Adjustable Residential Development Zone—Before Owner may apply to the County for the first time for any permit to construct any residential improvements, Owner, at Owner's sole expense, shall cause a qualified surveyor to prepare a legal description for an area not to exceed ___ compact and contiguous acres to be known as the "**Development Zone**" and to place permanent monuments identifying such. A map of the Property, attached hereto as Exhibit __, indicates the approximate location of the Development Zone contemplated by the Granting Owner as of the date of this Easement. The surveyed area and its corresponding legal description shall reasonably conform to the approximate area shown on Exhibit __. The surveyor's map showing the monumented area shall be submitted to Land Trust for its review and approval as set forth herein. Once surveyed, the map shall be recorded.

Granting Owner reserves the right to change the location of the Development Zone before it is surveyed or monumented so long as (i) the new location of the Development Zone does not diminish the Conservation Values of the Property beyond the contemplated improvements that were to be located within the Development Zone indicated in Exhibit __; (ii) the new Development Zone does not exceed ___ acres, and (iii) Granting Owner obtains prior written approval from Land Trust[, which approval shall not be unreasonably withheld and shall take the conservation values and Easement purposes into consideration].

> **Commentary.** A gerrymandered snake of an area would be contiguous, so consider how to define the nature of the Development Zone to minimize its impact on the particular land. The reference to "compact and contiguous" acres is one approach, but it leaves a lot of wiggle room. Consider whether the Zone can be limited to a segment of the entire property. There is less need for specificity when the Development Zone is not visible to the public and when the Zone is very small. Be sure to address the road to new structures and their water and utilities and other needs. Pull provisions as needed from the earlier paragraphs to limit the use of the Development Zone.

AND/OR

(b)(2) Residential Use of Development Zone—Owner may engage in unrestricted residential use of the Development Zone to the extent permitted by all applicable _____ County ordinances and any other applicable federal, state, and local laws, regulations, and requirements except (i) no [nonresidential] [industrial use or] activity shall occur in the Development Zone, (ii) no more than ____ primary residence[s, one Second Unit and one Guest Cottage], as those terms are defined in _____ County Code sections _____ in their current form, copies of which are attached as Exhibit __, shall be permitted in the Development Zone, and (iii) all development shall be constructed in a matter to prevent any [minimize] visibility [from ____road/park_____]. [The total interior floor space of the Guest Cottage shall not exceed ___[1,000]___ square feet and the

total interior floor space of the Second Unit shall not exceed ___[1,200]___ square feet.]

Commentary. Consider whether to permit home occupations (addressed below) and, if so, do not forbid nonresidential use of the Development Zone. Consider whether the restrictions should be based on the law current at the time of signing the Easement (in which case attach a copy as an exhibit) or the law as it may change from time to time. Consider defining and limiting the nature, location and size of new structures more specifically if possible. There is less need for specificity when the Development Zone is not visible to the public and when the Zone is very small. Be sure to address the road to new structures and their water and utilities and other needs. Pull provisions as needed from the earlier paragraphs to limit the use of the Development Zone.

OR

(b)(3) Expansion of Existing Dwellings [Structures] –

Commentary. Expansion may be forbidden, permitted so long as expanded structures do not exceed ____ square feet, permitted so long as structures remain one story, permitted so long as the footprint remains unchanged, permitted so long as the footprint doesn't exceed specified percentage of existing footprint, permitted with approval of Land Trust or permitted on some other basis. Clarity is the key, coupled with careful documentation of existing conditions in the baseline. There is usually less need to prohibit expansion or to be specific as to permitted expansion when the Development Zone is not visible to the public and when the Zone is very small. Be sure to address any road, water, utilities and other needs that may be associated with a permitted expansion.

AND/OR

(b)(3) Modification or Relocation of Building Envelope – Owner and Land Trust acknowledge that the boundaries of the Building Envelope may have to be adjusted from the configuration shown on the Map to moderate the effect of changing ocean levels [changes in river/creek location over time] and/or erosion of the Property [, as well as other climate change effects]. Owner and Land Trust agree to cooperate in making boundary adjustments, provided that any adjustments shall not result in an increase or (without Owner's approval) in a decrease in the number of structures or lots permitted hereunder or alter other rights or obligations otherwise recognized or imposed under this Easement. [If the boundaries of the Building Envelope are relocated pursuant to this paragraph, construction of any replacement residence may occur anywhere within such revised area, without regard to limitation to construction substantially within the existing footprint.]

Commentary. Consider a paragraph such as this whenever an Easement grants rights anywhere near an ocean, river, creek or in a location where erosion may occur such as along a bluff as changes over time may affect the exercise of the rights. Use the bracketed "as well as" clause carefully or edit it to be more narrow to fit the circumstances. Edit the second bracketed material as needed for the topography and circumstances.

(b)(4) Placement and Size of Replacement Structures—If the existing permitted structures are destroyed or damaged beyond repair, replacement structures of similar size and character may be built in conformity with law so long as _____. [the footprint remains unchanged, the structures are limited to one story, the structures are built within the designated Development Zone, the structures do not exceed ____ square feet, Land Trust approval of differences is obtained as set forth herein ....]

> **Commentary.** If there are any structures on the Property, address what happens if they deteriorate or are destroyed. Prohibit replacement if possible. Provide for their replacement with structures in a different location when appropriate, as may occur for example if the existing location is in the scenic viewshed and the required replacement location is behind a hill. Consider defining and limiting the nature and size of replacement structures as specifically as possible. For example, depending on the land, it may be beneficial to require an existing taller structure be replaced, if at all, with a shorter one that is not visible or less visible from public roads or parks. There is less need for specificity when the Development Zone is not visible to the public and when the Zone is very small. Be sure to address the road to replacement structures and their water and utilities and other needs.

(b)(4) Preservation of Historic Structures—The _____ structure ("Building") identified on Exhibit __ shall at all times be maintained in the same or better structural condition and state of repair as that existing on the effective date of this Easement. Unless the Building is destroyed or damaged beyond repair, this obligation to protect and maintain shall require the preservation, rehabilitation, restoration, and/or reconstruction of the barn whenever necessary in accordance with the United States Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, and The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (36 C.F.R. 68). If these Standards are abandoned, Owner and Land Trust may apply reasonable alternative standards subject to any requirements imposed by the Internal Revenue Service or the National Park Service in connection with Historic Preservation, Conservation, and Scenic easements and/or properties listed on the National Register of Historic Places.

(i) Owner agrees to assume the cost of continued maintenance and repair of the Building in accordance with the recommended standards in the Secretary of the Interior's *Standards*, so as to preserve the architectural, historical, and archeological integrity of the features, materials, appearance, workmanship, and environment in order to protect and enhance those qualities that made the property eligible for listing in the National Register of Historic Places.

(ii) Any alterations that may affect the historical or archeological integrity of the Building must have prior written approval of Land Trust. Unless the Building is destroyed or damaged beyond repair, Owner shall not construct, demolish, alter,

nor remodel any portion of the Building. Owner shall not increase or decrease the height of the facades or the Building, adversely affect the structural soundness and safety of the Building or its facades or permit any significant reconstruction, repair, repainting or refinishing of the exterior of the Building that alters its state from its existing condition. Owner shall not construct additions to, or chemically or abrasively clean or sandblast the Building, nor construct any new building or structure in or on or move the Building, nor erect, construct, or move anything on the Property (except only temporarily) that would encroach on the open space and area surrounding the Building or interfere with a view of the Building or be incompatible with its historic or architectural character. Owner may not erect any structures or appurtenances that would in any way obstruct the view of the Building from _____ Road.

> **Commentary.** The Building needs to be specifically identified on a map and in the baseline in full detail as to its significant and historic elements. Consider whether to require Land Trust agreement that the Building has been destroyed or damaged beyond repair as a subsequent Owner may use less severe damage as an excuse to destroy the Building. One option would be to look to the sudden damage or loss that would qualify for a loss deduction pursuant to Internal Revenue Code §165(c)(3) (construed without regard to Owner's legal status, trade, or business or any applicable dollar limitation). For one definition of facade: "The term "façades" includes doors, door frames, windows, window sashes, window frames and casings, dormers, porch, siding material, foundation stones, steps, roof profiles, chimney profiles and materials."

(b)(5) Accessory Structures, Pools, Tennis Courts, and the Like—Recreational structures and other accessory structures may be constructed within the Development Zone so long as _____.

> **Commentary.** Define and limit accessory structures more specifically as appropriate to the particular land. Limit to recreational structures not otherwise prohibited in the easement. Consider placement, size, height, prohibition of kitchen/outdoor kitchen, prohibition of bathroom or electricity, prior approval of Land Trust—all the considerations identified above for other structures should be revisited here. Be sure to address any road, water, utilities and other needs that may be associated with a permitted expansion.

(c) Agricultural Structures and Improvements—Existing agricultural structures and improvements as shown in Exhibit ___ may be repaired, reasonably enlarged, [enlarged up to __ percent] and replaced at their current locations for agricultural purposes without further approval from Land Trust]. New buildings and other structures and improvements to be used solely for agricultural production on the Property, including barns, equipment sheds, and improvements to be used for agricultural production purposes or sale of farm products predominantly grown or raised by Owner on the Property, but not including any dwelling or farm labor housing, may be built within the Development Zone depicted in Exhibit __[, without further approval of Land

Trust]. Any [other] agriculture production or marketing-related structures may be constructed, repaired, enlarged or replaced only with the written approval of Land Trust as provided herein.

> **Commentary.** If the term "reasonably enlarged" is used, it must be defined. All of these options on size, height, and the like need to be negotiated and better defined based on the specific needs of the individual land. Consider requiring replacement structures to be built at a better location.

AND?

Owner may construct a single-story utility shed provided that said utility shed shall not exceed ___[500]___ square feet total interior floor space and provided that said the utility shed is constructed on the existing concrete pad. If the existing concrete pad is no longer usable, a replacement concrete pad may be constructed so long as the replacement concrete pad is located in substantially the same location as the existing concrete pad.

> **Commentary.** Provide for destruction of the existing pad? This paragraph is illustrative as the kinds of structures needed will vary across the country. The kinds of restrictions on placement, size, height, access, and so on need to be addressed for any structure.

AND?

Owner may construct one building for Agricultural Uses on the Property in accordance with all then-applicable federal, state, and local laws, regulations and requirements, provided that this building shall be no greater than ___[1,500]___ square feet in total interior floor space and may be used solely for storage of crops or livestock raised on the Property or storage of agricultural equipment and supplies necessary for raising or harvesting crops and livestock on the Property. The permitted agricultural building shall not be used, under any circumstances, for storage, processing, marketing, or sale of products made from crops or livestock, even when such products have been made from crops or livestock raised on the Property.

> **Commentary.** Use only if the term "Agricultural Uses" is defined elsewhere in the easement or if a definition is added here.

AND?

New buildings and other structures and improvements to be used primarily for agricultural production as defined above and not to be used for any dwelling or Farm Support Housing as defined below may be built on the Property within the "_____ Area" identified on Exhibit __. New buildings, structures or improvements proposed for locations outside the "_____ Area" may be built only with the approval of Land Trust.

(d) Existing Farm Support Housing—All existing dwellings or structures used to house farm tenants and employees, as shown on Exhibit __, may be repaired[, reasonably enlarged] and replaced at their current locations [with the approval of

Land Trust].

Commentary. If the term "reasonably enlarged" is used, it must be defined. All of these options on size, height, and the like need to be negotiated and better defined based on the specific needs of the individual land. Consider requiring replacement structures to be built at a better location.

AND?

(d) Agricultural Employee Housing—No agricultural employee housing may be constructed or placed on the Property without advance written approval of Land Trust. Land Trust may only grant approval if Owner can demonstrate to Land Trust's satisfaction that such agricultural employee housing is reasonable and necessary for the agricultural operation of the Property. Any agricultural employee housing must be located entirely within the Development Zone as established in Exhibit __.

OR

(d) Agricultural Employee Housing—New dwellings or structures to be used primarily to house tenants or employees engaged in agricultural production on the Property ("Farm Support Housing") may be built on the Property, provided they are located entirely within the Development Zone as established in Exhibit __. Farm Support Housing shall not be subdivided from the Property under any circumstances.

(e) Farm Stand/Winery/Other Production or Agricultural Sales Facility—Owner may engage in Commercial activities related to Agriculture production/processing [within a permitted Structure] of agricultural products, a majority of which are produced on the Property or another property owned by Owner, into derivatives thereof; the Commercial retail and/or non-retail sale of Agricultural products and derivatives, a majority of which are produced on the Property or on a property owned by Owner;

(e) Commercial Agricultural Activities—Owner may engage in Commercial activities related to Agriculture inside of Structures [as that term is defined below] used for Agriculture (for example, farm machine repair shop or seed and mineral shop), and seasonal or occasional outdoor Commercial activities that are accessory to the agricultural uses of the Property (for example, hay rides, corn maze, farm animal petting zoo, pick your own produce) and sale of Agricultural products produced off of the Property but associated with such seasonal or occasional activities (for example, the sale of apple cider on a hay ride), and Commercial services related to Agriculture limited to equestrian sports, events, and shows, boarding, the training of horses/ponies and riders, and the provision of recreational or therapeutic riding opportunities.

Commentary. Each of these activities presents significant monitoring and other issues, including traffic, parking, public access, and scenic impairment. These

would need to be addressed by other provisions defining the location of activities, frequency, numbers of participants, and so on.

AND/OR

(e) Commercial Activities—Permitted commercial activities and uses shall be limited in scale to those appropriate to the size and location of the Property and shall not harm the Conservation Values. The following Commercial activities and uses are permitted:

(1) Commercial activities within permitted residential units (for example, ongoing activities such as a professional office or an at-home child day care; or occasional activities such as fundraisers or benefits);

(2) Commercial activities related to Agriculture inside of Structures used for Agriculture (for example, farm machine repair shop or seed and mineral shop);

(3) seasonal or occasional outdoor Commercial activities that are accessory to the Agricultural uses of the Property (for example, hay rides, corn maze, farm animal petting zoo, pick your own produce) and sale of Agricultural products produced off of the Property but associated with such seasonal or occasional activities (for example, sale of apple cider on a hay ride);

(4) production/processing (within a permitted Structure) of Agricultural products, a majority of which are produced on the Property or another property owned by Owner, into derivatives thereof;

(5) Commercial retail and/or non-retail sale of (i) Agricultural products, a majority of which are produced on the Property or on another property owned by Owner; or (ii) derivatives produced pursuant to the preceding paragraph;

(6) Commercial services related to Agriculture limited to equestrian sports, events, and shows, boarding, training of horses/ponies and riders, and provision of recreational or therapeutic riding opportunities; and

(7) Commercial Passive Recreational uses operated by a resident on the Property, or by Owner. Structures associated with these uses must be permitted herein. Any Commercial Passive Recreational uses shall be limited to a de minimis amount.

Commentary. This paragraph is borrowed substantially from the Maryland Environmental Trust Model Easement, available at http://www.dnr.maryland.gov/met/modeleasement.pdf. Each of these activities presents significant monitoring and other issues, including traffic, parking, public access, and scenic impairment. These would need to be addressed by provisions defining the location of activities, frequency, numbers of participants, and so on. Be sure the defined terms are defined in the final easement.

OR

(e) Winery— The construction or placement on the Property of a winery or other structure used for production, tasting or sale of wine is prohibited.

(f) Caves—No caves may be constructed on or under the Property.

OR

(f) Caves—One [or a specified number of] caves may be constructed on or under the property within the Development Zone as established in Exhibit __. The cave[s] shall not be used, under any circumstances, for processing, marketing, or sale of products made from crops or livestock, even when such products have been made from crops or livestock raised on the Property. Cave spoils shall not be deposited on any part of the Property.

OR

(f) Caves—Construction, maintenance, repair, renovation, replacement, and use of caves for _____ storage to the extent permitted by, and in accordance with, all applicable _____ County ordinances and all other applicable federal, state, and local laws, regulations, and requirements, so long as such caves do not exceed _____ (__,000) square feet of interior floor space and so long as wine and wine storage is exclusively for wine produced at the winery then in existence on the Property and so long as any entry or exit to the caves is not constructed in the _____ Zone. The cave[s] shall not be used, under any circumstances, for processing, marketing, or sale of products made from crops or livestock, even when such products have been made from crops or livestock raised on the Property. Cave spoils shall not be deposited on any part of the Property.

(g) Signs—The construction, maintenance or placement of any signs on the Property greater than ____ inches in width by ____ inches in height is prohibited except (i) to advertise the Property for sale or rent, (ii) to post the Property to control unauthorized entry or use, (iii) to identify the Property, (iv) to provide directional or interpretive information, (v) to exercise First Amendment rights through temporary political signs [near a residence], or (vi) to post notice of the Easement. All signs shall comply with all applicable federal, state, and local laws, regulations, and requirements. Commercial signs (including billboards) unrelated to permitted activities conducted on the Property are prohibited.

> **Commentary.** Consider whether to limit the total number of signs of one or all types. Other possible reasons for signs might include (1) state solely the name and/or address of the Property and/or the Owner; (2) advertise the Agricultural uses of the Property; (3) advertise the goods or services sold or produced in accordance with permitted Commercial uses of the Property; (4) commemorate the history of the Property, its recognition under local, state or federal historical registers, or its protection under this Easement or federal, state or local environmental or game laws; (5) provide directions to permitted uses and Structures on the Property; and/or (6) address hunting, fishing, or trespassing (including signs for the purpose of delineating Property boundaries).

(h) Art—The construction, placement, display, repair and removal of art and sculptural pieces out of doors is [permitted/prohibited].

Commentary. Absent some justification for a different rule, art can generally be permitted in the Development Zones and generally be prohibited in forever wild and natural areas. Consider limiting the location or size, use of any lights, risks presented from lightning, visibility from outside the easement land, and other issues.

(i) Boating/Recreational Structures—The construction, use, maintenance, renovation, expansion, or replacement of boat docks and piers in the existing lake [river] is [permitted/prohibited].

Commentary. Consider limiting the location or size or other characteristics of any permitted replacement structure.

(j) Visual Screening—To maintain the scenic view of the Property from _____Road/Street/Etc. as set forth as a Conservation Value in the recitals and baseline documentation, Owner shall not erect, construct, assemble, or plant visual screening, including stockade fences, tall berms and hedges or other plantings, that would, in Land Trust's sole discretion, substantially block or diminish views of the Property from public roadways or waterways.

(k) ___[Catchall]_____—

Commentary. Other structures to consider: decks, camping platform, water tanks, pipes, stone walls, well and cover, feed troughs, picnic tables, outdoor kitchens, erosion control, pumps, pump houses, habitat enhancement devices such as birdhouses and bat houses, footbridges, stream crossing structures and stream access structures, internet reception and radio/cell towers, parking lot (additional parking spaces), barn, stable, silo, spring house, green house, hoop house, corrals, hayracks, stock tanks or centerpivot sprinklers, riding arena (indoor or outdoor), horse walker, manure storage pit, storage buildings, feeding and irrigation facilities, ramps, storage sheds, cabanas, tennis courts, bocce ball courts and roads to any structures—consider the broadest definition of structure and address any issues. At a minimum, be sure the easement addresses all existing structures and the types of structures that appear on similar properties in the vicinity. Also consider whether utilities are permitted for structures as utilities entail additional impact (electrical/water lines and rights of way, access roads). See *The Conservation Easement Handbook* for more ideas and provisions.

(*l*) Other Structures Prohibited—Except as provided in paragraphs 3.5, 4.4 and 4.13, no other structures may be constructed or placed on the Property.

(4) Utilities. The installation of new, or extension of existing, utilities (including, without limitation, water, sewer, septic tanks and systems, power, fuel, and communication lines and related facilities) is prohibited, except

(a) as necessary for Agricultural Uses [as that term is defined herein]

(b) to service permitted residential uses in the Development Zone

(c) to service other permitted structures and improvements, or

(d) for permitted uses pursuant to Paragraphs ___ and ___; or

(e) as permitted in paragraph ___ below.

Commentary. As worded, this permission is very broad and would permit utilities to cross sensitive habitat or scenic areas. Consider limiting the location of utility rights of way to a specific corridor or to the shortest distance, requiring relocation of existing rights of way to more suitable locations if significant changes are made, or imposing other requirements to protect and enhance other Conservation Values. The nature of the restrictions is necessarily site-specific. Note that this paragraph includes water, a subject that might be excluded here if more detailed water provisions below are used in the easement.

OR

(4) Utility Services and Septic Systems. Wires, lines, pipes, cables or other facilities providing electrical, gas, water, sewer, communications, or other utility services to the structures permitted herein may be installed, maintained, repaired, removed, relocated and replaced [in substantially the same locations documented in the Baseline Documentation], and Owner may grant easements over and under the Property for such purposes with the approval of Land Trust. Septic or other underground sanitary systems serving the improvements permitted herein may be installed, maintained, repaired or improved. No such easement may be permitted to cross the Property for the benefit of a parcel not subject to this Easement [or another easement granted by this Granting Owner].

Commentary. See above. A more extensive definition of utilities is ""Utilities" includes, but is not limited to, satellite dishes, electric power lines and facilities, sanitary and storm sewers, septic systems, cisterns, wells, water storage and delivery systems, telephone and communication systems and renewable energy systems (including but not limited to solar energy devices on a Structure; geothermal heating and cooling systems, also known as ground source heat pump; wind energy devices; systems based on the use of Agricultural byproducts and waste products from the Property to the extent not prohibited by governmental regulations; and other renewable energy systems that are not prohibited by governmental regulations).

(5) Surface Alterations Excepting Roads and Trails. Any alteration of the surface of the land, including, without limitation, the excavation, addition, dredging, deposit, or removal of soil, sand, gravel, rock, peat, or sod is prohibited, except

[the following are various options one could select, not all intended to be used]

as necessary for Agricultural Uses, so long as the Conservation Values and agricultural productivity of the soils are not harmed.

Commentary. Use only if the term "Agricultural Uses" is defined elsewhere in the easement or if a definition is added here.

AND/OR

as necessary for permitted residential uses.

Commentary. Consider whether to make "residential uses" a defined term.

AND/OR

as necessary for the [construction and] maintenance of permitted roads.

> **Commentary.** Different views exist as to the treatment of the margins of roads. One option is to specify how far one can clear from the center of roads. Consider any viewshed requirements on placement of a new road. Consider replacement of the road.

AND/OR

as necessary for permitted construction, or for permitted road and trail maintenance.

AND/OR

as minimally necessary to continue the normal management of the Property as described in the Baseline Documentation.

> **Commentary.** Consider building in a mechanism for permissible change of management practices to occur over time and be documented in an updated baseline.

AND/OR

as necessary for the construction of additional improvements as permitted herein.

AND/OR

as minimally necessary for the uses permitted by Paragraph __.

AND/OR

as required for fire trails and emergency needs.

"Alteration of the surface of the land" shall include filling, dumping, excavating, draining, dredging, mining, drilling, removing or exploring for or extraction of minerals, loam, soil, sands, gravel, rocks or other material on or below the surface of the Property, altering the surface or general topography of the Property, and depositing or accumulation of soil, trash, ashes, refuse, waste, bio-solids or any other material. Owner shall not explore for, develop, or extract minerals, metals, or hydrocarbons by any mining method, surface or otherwise, on the Property.

> **Commentary.** The final sentence may be more restrictive than required. If any exploration and extraction are permitted, address location, size, character, access, restoration and other issues.

[optional addition]

No disturbance of the soil shall occur within ___[100 feet]___ of the banks of the watercourse sometimes known as _____ Creek running through the Property and depicted approximately in the Baseline Documentation.

OR

A one-hundred (100) foot vegetative buffer strip along each side of the _____ River [Creek] [measured from the middle of the River [Creek]] is required. Owner shall maintain the buffer strip that currently exists and/or allow it to naturally revegetate and/or plant the buffer strip with native species. Once established, Owner shall not

disturb the buffer, except as reasonably required for (1) erosion control; (2) Passive Recreational uses that require water access and associated Structures permitted herein; (3) access to water for irrigation of the Property; (4) control of non-native and invasive species or removal of dead, diseased, or infected trees as permitted herein; (5) access to portions of the Property that are accessible only by crossing that waterway; (6) livestock stream crossings in accordance with an approved Soil and Water Conservation Plan prepared by the Soil Conservation District; (7) enhancement of Wetlands, wildlife habitat or water quality; (8) maintenance and use of the existing _____ [Structure(s) located within the buffer]____. Owner shall not store manure or compost nor use or deposit pesticides, insecticides, herbicides or fertilizers (except for revegetation or planting of native species, or control of invasive or diseased species) within the buffer strip.

> **Commentary.** Delete provisions that are inapplicable and check that terms are defined and issues addressed as needed.

OR

"Wetlands" means portions of the Property defined by state or federal law as wetlands at the time of the proposed activity. Other than the creation and maintenance of man-made ponds with all necessary and appropriate permits, and the maintenance of Agricultural drainage ditches, the diking, draining, filling, dredging or removal of Wetlands is prohibited.

AND/OR

(5) Soil Disturbance. Any use or activity that causes or is likely to cause [significant] soil degradation or erosion, soil compaction, or the pollution, degradation, or depletion of any surface or subsurface waters, or the degradation of native vegetation communities or any other native habitats on the Property is prohibited. Any use or activity, including the use of heavy machinery or tractors, that is likely to cause significant compaction, erosion, or disturbance of the soil in the Property or degradation of water is prohibited, including but not limited to grading, discing, dragging, harrowing, plowing, ripping, floating, leveling, clearing, and any other activity that exposes bare soil. No geothermal exploration or development is permitted. Mining, drilling, exploration for, or development and/extraction of minerals, hydrocarbons, steam, soils, gravel, rock, or other materials on or below the surface of the Property are all prohibited, [using any method that disturbs the surface of the land,] except

[the following are various options one could select, not all intended to be used]

as necessary for the permitted drilling of water wells pursuant to Paragraph __.

> **Commentary.** Consider whether to limit the permitted drilling locations both because of the undesirability of drilling in specific locations and because of the disruption to be caused by installation of pipelines, roads, tanks and the like.

AND/OR

that Owner may disturb soil and land surface on the Property if (a) limited and localized in impact, affecting no more than ___ square feet/acres of the Property in the aggregate at any time; (b) not irremediably destructive of significant conservation interests; and (c) reasonably necessary for, and incidental to, carrying out the improvements and agricultural production uses expressly permitted on the Property by this Easement. Owner shall use all practical means to mitigate any adverse effect on the Conservation Values of the Property [and adjacent land] in carrying out any permitted activities, and upon completion, Owner shall promptly restore any portion of the Property affected thereby as nearly as possible to its condition existing prior to commencement thereof.

AND/OR

that Owner undertake conservation practices that promote native flora and fauna, enhance soil stabilization, or reduce erosion in accordance with sound and generally accepted best management practices, including restoration work. Approval of Land Trust is required when conservation practices involve significant surface alteration, soil compaction or include using material such as rock or concrete in amounts over __[e.g., 10]__ cubic yards in volume in any calendar year.

(5) Removal, Mining and Extraction. The mining or extraction of soil, sand, gravel, rock, oil, natural gas, fuel, or any other mineral substance, using any method that disturbs the surface of the land, is prohibited.

OR

(5) Removal, Mining and Extraction. No person has retained a qualified mineral interest in the Property of a nature that would disqualify this Easement for purposes of §1.170A-14(g)(4) of the Treasury Regulations. From and after the Easement Date, the grant of any such interest is prohibited and Land Trust has the right and obligation to prohibit the exercise of any such right or interest if granted in violation of this provision.

OR

(5) Removal, Mining and Extraction. The removal and extraction of soil, sand, gravel, rock, oil, natural gas, fuel or any other mineral substance through a surface removal and extraction method, is prohibited. Well drilling and underground piping for and the production of subsurface mineral substances does not constitute a surface removal and extraction method, but rather constitutes a subsurface removal and extraction method, and such subsurface removal or extraction as permitted herein does not impair the purpose of this Easement and the significant conservation interests being protected by this Easement. Owner shall notify Land Trust in writing prior to conducting any subsurface exploration or extraction. Any surface disturbance resulting from permitted subsurface removal or extraction activities, such as the extraction of oil, natural gas, or other hydrocarbon products, shall be temporary and limited to an area not exceeding two (2) acres and shall be in accordance with applicable law. There shall be no more than one (1) removal or extraction site within the Property at any time.

Owner shall be entitled to install, repair, replace and remove an underground pipeline on the Property from any extraction site to the boundary of the Property. After any temporary subsurface removal and/or extraction, Owner shall restore all disturbed areas to a condition similar or equivalent to its topographical state prior to the disturbance by restoring soils and replanting suitable adapted vegetation. Whenever possible, access to removal and/or extraction sites shall be by existing roads. Any temporary disturbance of the surface of the Property resulting from a subsurface removal and extraction method shall not irremediably or significantly impair or interfere with the Purpose of this Easement and the significant conservation interests being protected by this Easement. [At Owner's election,] [At Land Trust's direction,] any subsurface removal or extraction activities may be concealed or conducted such that the production facilities are compatible with existing topography and landscape. Granting Owner and Land Trust intend that the provisions in this paragraph satisfy the requirements of Treasury Regulation § 1.170A-14(g)(4)(i) with respect to Owner's retention of a qualified mineral interest, as that term is defined in the Internal Revenue Code and related Treasury Regulations.

Commentary. Notice to Land Trust is mandatory. Treasury Regulations §1.170A-14(g)(5)(ii). Consider requiring approval in addition to notice.

AND/OR

(6) Paving, Road Construction and Trails. No building of roads, grading or other changes in the normal topography of the land are permitted, except to continue the normal management of the land as expressly permitted herein or documented in the Baseline Documentation and the existing road and related alterations documented in the Baseline Documentation. No portion of the Property presently unpaved shall be paved or otherwise be covered with concrete, asphalt, or any other paving material, nor shall any paved or unpaved road for access or other purposes be constructed without the advance written approval of Land Trust. [Any residual roads may be used as single-track trails only and must be reasonably maintained in a manner that will prevent erosion of the topsoil and leaf mold layers of the soil.]

OR

(6) Paving, Road Construction and Trails. The maintenance, repair, and use of existing access and agricultural roads on the Property in substantially their present location and condition are permitted. No extension or expansion of roads into forever wild or open space land is permitted without prior approval of Land Trust as set forth below.

OR

(6) Paving, Road Construction and Trails. The [construction,] maintenance, [relocation,] repair, and use of roads on the Property are permitted.

Commentary. Avoid the very broad provision created by deletion of the brackets if at all possible. It may be so broad as to invalidate many easements, excepting perhaps some agricultural easements. Construction of new roads outside an agricultural road context

should be permitted only after consideration of the location and impact on conservation values, so the location should be designated on maps or should require land trust permission or some other control should be imposed.

OR

(6) Paving, Road Construction and Trails. No portion of the Property presently unpaved shall be paved or otherwise be covered with concrete, asphalt, or any other [impervious] material, nor shall any road for access or other purposes be constructed without the advance written approval of Land Trust as provided herein. Existing unpaved farm roads as required by agricultural operations documented in the Baseline Documentation are permitted to remain without further Land Trust approval. Owner shall not oil unpaved roads without prior Trust consent, which may be given for oiling with vegetable oils in accordance with best practices. Owner shall notify Land Trust of any relocation of or addition to unpaved roads within the Agricultural Area.

(a) Existing Road—The maintenance, repair, and use of the existing road currently existing as of the date of this Easement in substantially their present location, width, length, and unpaved condition are permitted. [The existing access road to _____ may be paved in its present location, and Owner may install an access gate on the existing access road. In addition, Owner may widen the existing access road so long as the width does not exceed _____ feet.]

OR

(a) Existing Road—The existing access road may be extended or otherwise altered to enable access to _____, so long as any new road construction (i) occurs below ___ feet of altitude and (ii) does not encroach upon the _____ to any greater extent than the access road existing as of the date of this Easement documented in the Baseline Documentation.

OR

(a) Existing and New Roads—The maintenance, repair, relocation, improvement, and use of the existing road on the Property, and the construction, maintenance, repair, relocation and use of ____ new roads for access to the Property and to access the Development Zone are permitted. These roads shall be unimproved, unpaved, and no greater than _____ feet in width, except that the primary road used to access the Development Zone may be paved and up to _____ feet in width or improved to the minimum extent necessary to accommodate legal requirements existing at the time of construction. Owner shall not permit any road or driveway access through any portion of the Property to any adjoining parcel, whether or not under the same ownership.

Commentary. Reference to "legal requirements existing at the time of construction" gives up some control to an unknown future. If appropriate, include some limitations on the character of road permitted (single/two lane road or more).

(b) Foot Trails—The construction, relocation, maintenance and use of [unpaved] foot trails on the Property in substantially their present location and condition is permitted. Foot trails may be realigned so long as such realignment has been approved in advance by Land Trust as provided herein, and so long as realignment does not degrade the ecological and scenic Conservation Values of the Property. Land Trust may approve limited extensions of and construction of new foot trails as appropriate to the circumstances, with consideration given to the risk of increasing trespassing, the risk of erosion, and similar concerns, and so long as that construction does not degrade the ecological and scenic Conservation Values of the Property. Use of foot trails shall be nonmechanical [nonmotorized] and limited to noncommercial Recreational Activities as described herein. Owner may utilize small quantities of decomposed granite or similar crushed material for trail surfacing.

Commentary. Require that trails be covered (if at all) by wood chips, gravel, or other highly porous surface? Be sure there is a definition of Recreational Activities, included below.

AND?

This paragraph expressly permits Owner to enter into a trail easement with a public or non-profit agency for noncommercial recreational purposes.

Commentary. Define the terms? Include any restrictions? Require Land Trust approval? Consider whether the trail will have to comply with the ADA and the requirements for width, surface and the like that the ADA will impose.

AND?

(c) Impervious Surface—No more than __ percent of the surface [square feet] of the Property may be covered with impervious material of any kind made or added by humans, including concrete, asphalt, packed earth, structures, tents, or other material.

Commentary. Consider adding: Owner must notify Land Trust of any construction or activity that increases impervious coverage by _____ square feet or more, whether or not approval is required for that construction or activity.

(7) Vehicles. The operation of any motorized or non-motorized vehicle off permitted roads [outside the Development Zone] is prohibited except for urgent emergency uses.

Commentary. Consider any possible ADA issues.

OR

(7) Vehicles. The operation of any motorized or non-motorized vehicle off permitted roads is prohibited except (i) in conjunction with permitted Agricultural Uses, (ii) for urgent emergency uses, (iii) for maintenance [and restoration] of the Property and its water supply, (iv) addressing trespassing, and (v) monitoring this Easement.

Commentary. Use only if the term "Agricultural Uses" is defined elsewhere in the easement or if a definition is added here.

OR

(7) Vehicles. Use of bicycles, motorcycles, all-terrain vehicles, or any other type of motorized or non-motorized vehicles on or off roadways on the Property is prohibited except that Owner or others under Owner's control may make limited use of vehicles when reasonably necessary for permitted conservation management activities, permitted residential or recreational uses, or urgent emergency uses, or as permitted by existing easements of record as shown in the Baseline Documentation.

(8) Water. The Property includes all water and water rights, ditches and ditch rights, springs and spring rights, reservoir and storage rights, wells and groundwater rights, creeks and riparian rights and other rights in and to the use of water historically used on or otherwise appurtenant to the Property. Owner reserves and shall retain all right, title, and interest in and to all tributary and non-tributary water, all appropriative, prescriptive, contractual or other water rights, and related interests in, on, under, or appurtenant to the Property for use on or for the benefit of the Property in a manner consistent with this Easement and in accordance with applicable federal, state, and local laws, regulations and requirements. Activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or sub-surface waters, are prohibited. Alteration or manipulation of any existing water courses, creeks, wetlands and drainages located on the Property, and the creation or development of any new water source or water impoundment on the Property, including, but not limited to, wells, springs, creeks, dikes, dams, ponds, tanks, and cisterns, by any means is prohibited, except that

(a) Existing Well—Owner may maintain and deepen the existing well located at _____.

OR

(a) Existing Water System—Maintenance, repair, replacement, expansion and use in its present location of the existing agricultural reservoir and other irrigation improvements, including the existing pump and pump house, on the Property are permitted in accordance with all then-applicable federal, state, and local laws, regulations and requirements.

(b) Replacement Water Supply—Owner may replace or rebuild existing water supply systems and wells, and construct new water supply systems and wells, as necessary to maintain adequate water supply to the Property (with the term "adequate" to be judged based on the levels of water use consistent with the Conservation Values of the Property).

Commentary. Consider whether to restrict the location of any replacement system.

OR

(a&b) Water Systems—Maintenance, repair, improvement[, enhancement]and replacement of existing water supply systems [existing wells and other irrigation improvements] on the Property, and the construction of new water supply systems including, but not limited to, springs, wells, holding tanks, pipes and fire hydrants [including the drilling of additional wells and constructing or siting of water storage improvements, fixtures and pipelines for water], are permitted to the extent necessary for noncommercial residential use by Owner exclusively on the Property[and any lawful use on other property (i) owned or controlled by Owner or ____[relatives/affiliates]____ and (ii) _____ County Assessor Parcel Nos. _____, and _____] and for fire protection, in accordance with all applicable federal, state, and local laws, regulations, and requirements.

OR

(b) Water Resource Development—Owner may maintain, modify and relocate existing water resources on the Property and develop and maintain a pond for wildlife on the Property not to exceed ____ in size. The principal existing water resources on the Property are _____. Any water-resource development or use shall be principally designed to enhance wildlife habitat or other permitted uses of the Property and shall be developed in a manner consistent with its Conservation Values. No water-resource development shall be for residential, agricultural, commercial, or industrial use of the Property.

AND/OR

(b) Irrigation Improvements—New irrigation improvements for permitted Agricultural Uses, including ponds, pumping stations, above ground storage tanks over ___ gallons, and _____[footprint over x feet, over x feet in height, visible from road??]_____, _____, require the prior approval of Land Trust as set forth below.

> **Commentary.** Use only if the term "Agricultural Uses" is defined elsewhere in the easement or if a definition is added here. Add some definition of size or nature of improvements subject to this requirement.

(c) Watershed Enhancement, Creek Restoration and Aquifer Enhancement—Owner may undertake activities to enhance watersheds, restore creeks or enhance natural aquifer recharge so long as (i) the activities have been approved by a qualified native vegetation restoration expert and a qualified hydrologist, (ii) the activities are consistent with the Conservation Values of the Property and the purposes of this Easement, and (iii) the activities have been approved in advance by Land Trust as provided herein.

(d) No Transfer of Water Rights—Owner shall not separately [permanently] transfer, encumber, sell, lease or otherwise separate any water rights associated with the Property, nor any permits, licenses or contracts related to the water rights on the Property, or change the authorized or historic use of the water rights

without the consent of Land Trust. Owner shall not abandon or allow the abandonment of, by action or inaction, any of the water rights or such permits, licenses or contracts without the consent of Land Trust.

OR

(d) Limited Transfer of Water Rights – All water shall be retained in _____ County for agricultural production only. Water may be distributed to a contiguous property or other property owned or leased by Owner on an annual basis for agricultural production only. Any temporary distribution of water shall not impair the long-term agricultural productive capacity or open space character of the Property.

(e) Pollution Prohibited – Any disturbance of the soil or pasturing of animals is prohibited within ___ feet of _____ is prohibited.

> **Commentary.** Identify specific bodies of water, wetlands or watercourses by name and/or by reference to an attached map. Water rights vary significantly from State to State and especially from Coast to Coast.

(9) Trees and Other Vegetation.

(a) General Rule – The pruning, felling, or other destruction or removal of living [standing] [native] trees, shrubs, and other vegetation on the [Forever Wild Zone/Natural Area] Property is prohibited, except (i) to control, prevent or treat [immediate/impending/direct] hazards, disease or damage to humans, domestic animals, or permitted Property improvements, (ii) to prevent fire or create necessary fire breaks or fire trails, (iii) to maintain existing and permitted roads and trails, (iv) to develop reserved Agricultural Uses or other expressly permitted uses, or (v) to maintain the ecological health of vegetation communities present on the Property, all subject to prior Land Trust approval as provided below and pursuant to consultation with a qualified vegetation ecologist or other qualified specialist in the vegetation communities present on the Property. [All forestry operations shall be conducted in accordance with applicable federal, state, and local laws, regulations and requirements.]

> **Commentary.** Depending on the circumstances, it may or may not be appropriate to limit the prohibition to native trees. The distinction with standing trees arises if trees may fall on roads or trails; a fallen tree may retain sufficient roots to remain living so that the ability to cut the tree to clear the road may be important. A donor may wish to protect a particular species. Consider whether all of the exceptions require land trust approval; maintaining existing and permitted roads and trails might easily be allowed without prior approval on some properties. Use (iv) only if the term "Agricultural Uses" is defined elsewhere in the easement or if a definition is added here.

OR

The pruning, felling, or other destruction or removal of living standing native

trees, shrubs, and other vegetation in the Natural/Forever Wild Area is prohibited, except (i) to control, prevent or treat hazards, disease or damage to humans, domestic animals, or permitted Property improvements, (ii) to control fire or create necessary fire breaks or fire trails, (iii) to maintain existing and permitted roads and trails, (iv) to develop reserved Agricultural Uses or other expressly permitted uses, or (v) to maintain the ecological health of vegetation communities present on the Property, all subject to prior written notice of ___ business days to Land Trust and pursuant to consultation with a qualified vegetation ecologist, forester or other qualified specialist in the vegetation communities present on the Property. Tree clearing activities involving the removal of living native trees on greater than 1 square acre of the Property shall only be done with prior Trust approval as provided below, except clearing for reserved Agricultural Uses as provided herein.

> **Commentary.** This less protective alternative uses notice rather than approval. Use only if the term "Agricultural Uses" is defined elsewhere in the easement or if a definition is added here. Be sure the Natural or Forever Wild Area is defined. Consider whether to use a prior notice requirement as set out or a prior approval requirement—the choice may depend on the character of the land and the fragility of its plants and animals, the potential harm, the desires of the donor, and all the other pertinent circumstances.

AND/OR

Land Trust approval is not required for tree removal for emergency fire control.

> **Commentary.** Owner is unlikely to have much ability to control what firefighters do in an emergency in any event even if present.

(b) Timber Harvest Plan—In the event of a fire, salvageable trees may be harvested and sold in accordance with any existing or new timber harvest plan. Any trees removed to accommodate permitted development may be sold in accordance with the timber harvest plan consistent with generally accepted "Best Management Practices," as those practices may be identified from time to time by appropriate governmental or educational institutions, and in a manner not wasteful of soil resources or detrimental to water quality or conservation. Any modifications to the existing timber harvest plan and any new plan must be approved in advance by Land Trust and shall not harm the Conservation Values of the Property [or adjacent parcels].

(b) Forest Management—Owner reserves the right to manage forested areas on the Property including the right to remove exotic or invasive species and the right to practice pre-commercial thinning, weeding, cleaning, sanitation, pruning and other such measures to achieve silvicultural objectives, provided that all such forest management, cutting or harvesting shall be conducted in accordance with state certified best forest management and husbandry practices then current and by using uneven age selection silviculture methods designed to retain the

natural character of the area; and provided that all such activities shall be conducted in a manner to (a) maintain and/or foster vertical diversity (b) minimize disturbance to naturally occurring seedlings and saplings as necessary to assure adequate regeneration of native species (c) preserve intact riparian areas and wetlands; (d) foster species native to the area and soils; (e) protect the hydrological systems of the Property; (f) avoid disturbance to known threatened, rare or endangered plant or animal species and their habitat and (g) minimize disturbance to organic and mineral soils on the Property. "Selection silviculture" methods shall mean methods of harvesting in which individual trees or small groups of trees are removed to regenerate new seedlings and to foster and/or maintain an uneven aged-forest composed of at least three distinct age classes of trees. Other methods of harvesting are permissible following a natural disaster only with the prior written consent of Land Trust.

Commentary. Limit to a portion of the Property?

(b) Forest Management Plan—The Forest Management Plan must be prepared by a qualified forester engaged by Owner. A qualified forester is a professional forester with a minimum of three years experience managing woodlands in and around _____ County who has furnished Land Trust satisfactory credentials including, at a minimum, evidence of a Bachelor of Science degree in forestry from an educational institution with a forestry curriculum accredited by the Society of American Foresters or other comparable educational standards and two letters of recommendation from similarly qualified professionals. The plan shall conform to (1) this Easement, (2) the requirements for certification as a "Well-Managed Forest" by the Forest Stewardship Council or similar body accredited worldwide to offer landowners independent, third-party certification of sustainable forest management practices, and (3) the following requirements and such other terms and conditions as Land Trust may require as conditions of approval after Review:

(i) A description of and an appropriately scaled and accurate map identifying the natural and physical features of the Property to include property boundary lines; forest type, stocking, age and stand history; wetlands and water bodies, including rivers, streams, ponds, and lakes both intermittent and year-round; roads, trails or other non-forested areas; special plant and wildlife habitats, including rare or endangered plant or wildlife species or communities identified by _____.

(ii) An access plan indicating principal routes of ingress and egress for all areas in which forest management is to be conducted including roads, trails and log landing areas. This access plan must minimize new forest openings. Access roads must not exceed ____[twenty (20)]____ feet in width.

(iii) Management of forest stands for long (i.e. ____[twenty (20)]____ years or more) rotations.

(iv) Implementation of Best Management Practices for the conduct of forest management and harvesting activities including establishment, maintenance and reclamation of log landings and skid roads.

(v) Creation of a balance of forest age classes and diversity of native species composition within the Property; i.e., no plantation forestry (a forest stand raised artificially, either by sowing or planting, except planting or replanting with a diversity of native species) nor any liquidation or clear cutting (except to remove diseased or damaged trees for replanting with a diversity of native species).

(vi) Measures to minimize erosion and conserve productive soils for sustainable uses including erosion control measures to be employed during, and at the completion, of each forest management activity to ensure soil stabilization and to prevent erosion and sediment run off adjacent to wetlands and water bodies.

(vii) Measures to maintain and enhance the quality of forest and timber resources on the Property.

(viii) Measures to protect the quantity and quality of water resources including the type, amount and location of herbicides, pesticides, fungicides, insecticides, rodenticides and fertilizers to be used, if any.

(ix) Measures to preserve canopy where identified as contributing to scenic or wildlife habitat resources described in this Easement.

(x) Measures to minimize adverse effects upon, and to protect and enhance, habitats for native species of plants and wildlife.

(xi) Prohibition of forestry activities except in accordance with the plan.

(xii) Requirement for on-site, active supervision of all harvesting activities by qualified forester with reporting requirements to Land Trust of any non-conformity with the plan.

(xiii) Requirement of completion of harvesting activities within one-year following date of plan or such longer period as is approved by Land Trust after review.

(b) Forest Management Plan—Any Forest Management Plan must include the following information: the location of boundary lines and their marking status, existing conditions including maps and documentation depicting stands, soils and stand history; location of planned harvests; plans and locations for access

ways and access improvements needed; and clear demonstration of methods designed to assure compliance with the standards for vegetation management and conservation protection set forth in _____. Land Trust may also require written notice ___ days before harvest is to begin after marking of all trees to be cut.

> **Commentary.** Consider the local forestry practices and likely future practices in determining how strict controls need to be. Limitations on the area that may be cut in any year or decade and other forms of limitation and control may be appropriate. Consider whether to use a prior notice requirement as set out or a prior approval requirement—the choice may depend on the character of the land and the fragility of its plants and animals, the potential harm, the desires of the donor, and all the other pertinent circumstances.

(c) Use of Wood—Wood derived from any permitted removal, including, but not limited to, wood derived from the cutting of fallen, dead or diseased trees, may be used by Owner as firewood for personal use on or off the Property [or other persons residing on the Property as firewood for use principally on the Property]. Up to ____ cords of wood per year may be used or bartered in exchange for tree-removal or other property maintenance services. Under no circumstances shall healthy native trees be cut solely for firewood, bartering, or any commercial purpose.

OR

(c) Use of Wood—Owner may gather and use of dead wood or diseased tree for personal noncommercial residential use [on the Property].

(d) Additional Cutting—Owner may (i) keep the access road/permitted roads clear and Owner may clear underbrush, branches, and woody and non-woody vegetation having a basal diameter of no more than _____ inches anywhere on the Property; and (ii) within or outside the Development Zone maintain or enhance the view from the Residence and Second Unit; except that Owner may clear no more than ____ mature trees of greater than ____ inches basal diameter within a _____ year period for said purpose provided that prior Trust approval is obtained as provided below.

> **Commentary.** One person's enhanced view is another person's wanton destruction, so define and limit (ii) as much as possible. Consider the extent to which the owner will need to clear back encroaching forest from any open areas, meadows or orchards. Any of these provisions need to be carefully written in the easement and the conditions documented with care in the baseline.

AND/OR

(e) Non-Native Exotics—The planting, cultivating, or other intentional introduction or dispersal by Owner of non-native plant or non-native wildlife species outside of the Development Zone is prohibited.

> **Commentary.** If the paragraph is expanded to include the Development Zone, consider exceptions for garden plants, landscaping and the like.

AND/OR

Owner is entitled to maintain and restore native plant communities on any portion of the /Property and to control or eliminate non-native plant species using any methods approved by local, state or federal natural resource management agencies, including prescribed burning or mowing to remove native or non-native vegetation that is encroaching upon the native vegetation, and use of herbicides. [All prescribed burning operations shall be conducted in accordance with applicable federal, state, and local laws, regulations and requirements[and shall be conducted only with prior Land Trust approval as set forth herein].]

AND/OR

Maintenance and restoration activities involving the removal of any living standing native trees or occurring on greater than _____ acre[s] of the Property in any __ year period shall only be done with prior Land Trust approval as provided below.

AND/OR

Owner may engage in control or elimination of [native or] exotic plant and animal species anywhere on the Property that pose a threat to human health, safety or welfare, or the safety of domestic animals, in conformance with all federal, state, and local laws, regulations and requirements.

(f) Protection of Existing Vegetation—Except as expressly provided above, Owner shall not cut, remove, harvest, or destroy any live or dead native trees, native shrubs, or other native plant, except as necessary to control or prevent hazard or disease and to maintain healthy, diverse, native vegetation and habitat, in accordance with current ecologically-based practices.

> **Commentary.** Note inconsistency with earlier provision on firewood and adjust as needed. If there is a residence, be sure to except mowing, planting and maintenance of lawn, garden and landscaped areas and maintenance of any fire protection zones around the residence.

AND/OR

Any clearing of vegetation greater than _____ inches in basal diameter, grazing, or prescribed burning shall be pursuant to consultation with a qualified vegetation ecologist or other specialist in the vegetation communities present on the Property, proof of which shall be submitted to Land Trust in the form of a letter from that specialist, and shall be with prior Land Trust approval as provided below.

AND?

Owner may protect and culture native trees by any means, including thinning, pruning, or brush clearance. For purposes of this Easement, "native trees" shall include _____

(g) Harm to Vegetation—Unseasonal watering; use of fertilizers, pesticides,

biocides, herbicides or other agricultural chemicals [outside the Development Zone], weed abatement activities, incompatible fire protection activities, and all other activities and uses affecting vegetation that may adversely affect the purposes of this Easement are prohibited unless necessary to control or eradicate exotic plants, or to treat or prevent disease to native plants or animals.

(h) Existing Meadow—The maintenance of the existing Meadow using any means including, but not limited to, mowing and grazing is permitted. Encroaching trees overhanging into the meadow may be cut to retain the meadow's size and shape as described in the Baseline Documentation. [However, nothing in this paragraph shall be read to permit any fencing in or around the Meadow other than as currently used inside the Development Zone and described in the Baseline Documentation.]

> **Commentary.** This provision can be adapted easily to existing orchards and other open spaces that are to be retained as open land. Absent permission to cut encroaching trees, the open areas will be lost over time, potentially reducing biodiversity.

(i) New Open Areas—Owner reserves the right, with the prior approval of Land Trust as set forth below, to cut and remove forest vegetation and natural regeneration on [up to _____ acres/square feet on] the Property [in the area depicted on Exhibit __] to establish and maintain additional open areas for permitted agricultural use, habitat improvement, noncommercial recreational use or _____. Owner shall comply with applicable federal, state, and local laws, regulations and requirements.

(j) Fire—Owner may undertake wildfire management activities and control excess vegetation to lower the risk of wildfire with the approval of Land Trust. Such methods may include, but are not limited to brush removal, tree pruning, prescribed burning or mowing of the Property. Mowing may be accomplished with the use of a tractor or similar vehicle.

> **Commentary.** Earlier provisions also address prescribed burning and can be combined with this provision.

(10) Trash and Debris, Storage and the Like. The dumping, burial, burning, or other disposal or accumulation of wastes, ashes, refuse, debris, dredge spoils, hazardous or toxic materials, inoperative vehicles, or other unsightly or offensive material on the Property is prohibited, except that reasonably generated by activities permitted herein and disposed of in a lawful manner that does not cause, and is not likely to cause, soil degradation or erosion, harm to native plant communities, pollution of any surface or subsurface waters, or any other degradation of Conservation Values. No more than one unregistered [passenger] vehicle shall be kept on the Property.

> **Commentary.** Farm vehicles are often unregistered.

AND?

Agricultural products, agricultural chemicals (including herbicides, pesticides, fungicides, fertilizers, and other materials commonly used in farming operations), oil, fuels, and petroleum products for use in agricultural operations on the Property, agricultural byproducts, and agricultural equipment used on the Property may be stored on the Property in accordance with applicable federal, state, and local laws, regulations and requirements.

AND?

The application, storage and placement on the Property of domestic septic effluent and municipal, commercial or industrial sewage sludge or liquid generated from such sources for agricultural purposes may be undertaken only if in accordance with applicable federal, state, and local laws, regulations and requirements and only with the prior approval of Land Trust and only if a qualified professional environmental consultant certifies in writing that the application of any of these materials will not substantially diminish the viability and productivity of the agricultural soils on the Property.

OR

(10) Dumping. Dumping or placing of soil or other substance or material as landfill, or dumping or placing of trash, ashes, garbage, waste, abandoned vehicles, appliances, machinery, hazardous or toxic substances, dredge spoils, industrial and commercial byproducts, effluent and other materials on the Property is prohibited, whether by Owner or third parties. Soil, rock, other earth materials, vegetative matter, or compost may not be placed on the Property except when reasonably required for (1) Agriculture or other permitted uses on the Property; or (2) construction and/or maintenance activities permitted under this Easement.

(11) Agricultural Use Prohibited. Any [grazing or other] agricultural use of, or activity on, the Property is prohibited, except as expressly permitted herein in the Development Zone. Among those uses and activities specifically prohibited are the construction or operation of a winery and the planting of grapes or any other agricultural commodity for sale or trade, the operation of a winery or any other processing facilities, and the breeding or raising of livestock for commercial purposes on the Property.

AND?

The use, storage, or disposal on the Property of any pesticides, fungicides, and herbicides, or other toxic or polluting material, is forbidden except for use or storage in the Development Zone in relation to non-commercial agricultural production and for home and landscaping maintenance in the Development Zone.

OR

(11) Agricultural Use Permitted. Owner retains the right to use the Property [Agricultural Zone and Development Zone] for commercial agricultural purposes, including the Agricultural Uses described below, or to permit others to use the Property [Agricultural Zone and Development Zone] for commercial agricultural purposes, in

accordance with applicable federal, state, and local laws, regulations and requirements as long as the agricultural productive capacity and open space character of the Property are not thereby significantly impaired.

(a) Definition—"**Agricultural Uses**" shall mean the commercial production, processing, storage or retail marketing of crops, livestock, and livestock products. For purposes hereof, crops, livestock and livestock products include, but are not limited to (i) crops commonly found in the community surrounding the Property; (ii) field crops, including corn, wheat, oats, rye, barley, hay, potatoes, cotton, tobacco, herbs and dry beans; (iii) fruits, including apples, peaches, grapes, cherries, nuts and berries; (iv) vegetables, including lettuce, tomatoes, snap beans, cabbage, carrots, beets, onions, mushrooms, and soybeans; (v) horticultural specialties, including sod, seeds, nursery stock, ornamental shrubs, ornamental trees, Christmas trees and flowers; (vi) livestock and livestock products, including dairy cattle, beef cattle, sheep, swine, goats, horses, poultry, fur bearing animals, milk and other dairy products, eggs and furs; (vii) timber, wood, and other wood products derived from trees; (viii) aquatic plants and animals and their byproducts, and (ix) breeding and raising of bees.

[additional possible permitted agricultural activities to consider]

breeding, raising, pasturing, and grazing livestock of every nature and description so long as no more than _____ livestock (including, but not limited to, cows, emus, sheep, _____ and horses) and their immature offspring exist on the Property at any time; breeding and raising poultry; planting, raising, harvesting, and producing agricultural and horticultural crops of every nature and description [including non-commercial wine grapes provided, however, that under no circumstances shall more than a total of _____ vines for wine grapes be planted on the Property], boarding, stabling, raising, feeding, grazing, exercising, riding and training horses and instructing riders

> **Commentary.** Consider crops that require extensive greenhouses or other facilities and whether they should be permitted at all or restricted to portions of the Property that are not visible to the public. Consider agricultural activities that are unsightly or smelly and should be restricted in location or size. Some activities normally thought of as agricultural may not be appropriate such as sod farms.

(b) Prohibitions—Certain Agricultural Uses are prohibited, namely, (i) pig farms with over ____ pigs, (ii) raising over ___ chickens for eggs or meat, (iii) feed lots for cattle or other meat animals, (iv) mechanized farming, (v) aquaculture, (vi) intensive animal and fish farming, (vii) unnatural concentrations of animals, (viii) dumping of grape waste, (ix) use of _____[chemicals]_____ and (x) greenhouses in excess of ____ square feet. All other Agricultural Uses are prohibited if the agricultural productive capacity and open space character and the Conservation Values of the Property would be significantly impaired as a

result.

> **Commentary.** The lists of permitted and prohibited uses are internally inconsistent—both are overinclusive to promote discussion with Owner as to intended easement terms. If numbers of animals are too difficult to negotiate, consider using AUMs (animal unit month defined by NRCS – see http://www.thecattlesite.com/articles/1129/using-the-animal-unit-month-aum-effectively).

(c) Standards and Practices – All agricultural [and winery] activities shall be in accordance with the then-current scientifically-based practices recommended by the U.S. Cooperative Extension Service, U.S. Natural Resources Conservation Service, or other government or private natural resource conservation and management agencies then active.

OR

All agricultural operations on the Property shall be conducted in a manner consistent with a conservation plan prepared by a qualified conservation professional approved by Land Trust.

AND

This plan shall be updated periodically and any time the basic type of agricultural operation on the Property changes or ownership of the Property changes. This plan shall provide for management of the Property in a manner consistent with generally accepted "Best Management Practices," as those practices may be identified from time to time by appropriate governmental or educational institutions, and in a manner not wasteful of soil resources or detrimental to water quality or conservation. All agricultural operations shall be conducted in accordance with applicable federal, state, and local laws, regulations and requirements.

> **Commentary.** If possible, define the Best Management Practices more clearly or better define the organization(s) that prescribe the Best Management Practices.

AND

Agricultural activities for the production of fruits, vegetables, livestock and other items for commercial sale must also conform to generally accepted requirements for organic certification. Such conformity is to be evidenced by delivery to Land Trust, not less than once per year, of a certificate issued by an agent approved for such purpose by the United States Department of Agriculture or other responsible authority reasonably acceptable to Land Trust.

> **Commentary.** Restriction to organic only practices may make the easement more likely to be challenged as uneconomic as circumstances change. Consider whether to include in easement with an organic only provision a fall back provision to govern if organic farming becomes impracticable in the future. This provision could define impracticality or leave the issue for the court to determine.

Either way, the land would remain in farming even if organic farming could not continue.

(d) Processing of Agricultural Residues—Owner may engage in the burning, chipping, grinding, mixing or composting of agricultural residues of plant or animal origin that result from the production of farm, ranch, horticultural, floricultural or agricultural products, processed for the purpose of returning a similar amount of processed material to the Property. Such residues may include manures, orchard or vineyard prunings or other crop residues derived from the Property. The addition of amendments to stabilize or cure the processed residues to improve attributes such as bulk, nutrient value, pH, moisture or texture shall be permitted, so long as such addition does not cause the resulting volume of processed material to exceed substantially the amount of agricultural residues initially added. All processing of agricultural residues shall be conducted in accordance with applicable federal, state, and local laws, regulations and requirements.

(12) Commercial or Industrial Use. Any commercial or industrial use of, or activity on, the Property, except as expressly permitted herein, is prohibited.

(a) Definition—Among those uses and activities specifically prohibited are the construction or operation of a winery or any other processing facilities, the breeding or raising of livestock for commercial purposes, or the operation of an inn, hotel, bed and breakfast or any similar lodging entity. As used in this Easement, the term "**commercial**" shall mean any use or activity that involves the exchange of cash, goods or services, barter, forgiveness of indebtedness, or any other remuneration in exchange for goods, services, lodging, meals, entertainment in any form, or the right to occupy space over a period of time.

Commentary. If none of the (b) paragraphs are used, this paragraph should be merged with the opening sentence. An alternative definition of "commercial" would read: ""Commercial" means any use or activity conducted by Owner or a third party for the purpose of realizing a profit or other benefit to Owner, a designee, or a third party from the exchange of goods or services by sale, barter, or trade. In instances in which the Owner is a nonprofit corporation, Owner may conduct only those Commercial uses or activities that are directly related to Owner's mission. Commercial activities and uses that are permitted shall be limited in scale to those appropriate to the size and location of the Property and shall not harm the Conservation Values."

(b) Ecosystem Functions—Nothing in this paragraph shall prevent Granting Owner/Owner from developing ecosystem functions on the Property, consistent with the provisions governing land use set forth in this Easement, including, but not limited to, carbon sinks, stream bank restoration, biodiversity mitigation, carbon sequestration and wetland and stream mitigation (other than creation of wetlands from historically upland property, such as hillsides or sites with no more than one of the following: current or historical evidence of hydric soils,

hydrophytic vegetation, or wetland hydrology), provided that such developments are not in conflict or inconsistent with the conservation purpose of or the restrictions set forth in this Easement and that prior written approval for same is obtained from Land Trust. Land Trust is not responsible for monitoring any such activities for compliance with permit(s) therefor, and Land Trust has no obligation to enforce the permits.

> **Commentary.** This and the following (b) paragraphs use both Granting Owner/Owner to encourage consideration whether the Granting Owner wishes to reserve these rights personally or wishes them to be available for exercise by future owners. Consider whether to address limitations on surface activities as carbon sequestration could involve piping and wells. Alternatively, cut the opening words and begin with "Granting Owner/Owner may develop ...." Consider whether to limit these activities to a portion of the Property. Also, consider whether to retain the rights in Land Trust, or split them between Owner and Land Trust, or retain them in the Granting Owner (and family) but provide for them to belong to Land Trust when the land is transferred to a new owner or out of the family. Each transfer option has risks and potential enforcement problems. The most difficult may be stripping the rights on transfer to a successor owner. If rights remain with the family until transfer to a non-family member, the easement will need to define who is a family member (perhaps by reference to probate and inheritance laws). If the transfer is not automatic, then issues may arise in completing the transfer if the rights have become valuable.
>
> PS: "therefor" is correctly spelled in this paragraph.

OR

(b) Ecosystem Services Credits—Granting Owner/Owner reserves the right to enter into agreements whereby (1) the Granting Owner/Owner agrees to manage the natural resources associated with the Property in a specific manner consistent with this Easement or (2) permits a third party to manage such natural resources in a specific manner consistent with this Easement. In addition, Granting Owner/Owner reserves the right to sell, trade, or exchange quantifiable ecosystem services credits associated with the Property, provided that such sales, trades, or exchanges are exercised in a manner that is consistent with this Easement. All such agreements, and any management of such natural resources in accordance with such agreements, or to accomplish such sales, trades or exchanges, shall be subject to this Easement, and Granting Owner/Owner shall at all times remain responsible for compliance with this Easement. [One example of such agreement, sale, trade, or exchange is one under which Granting Owner/Owner receives compensation, including transferable credits, for participating in a greenhouse gas emissions offset program. Another example would be agreeing to restore, enhance or manage a wetland as part of a wetland banking or credit program, provided that such activities do not reduce existing areas of productive timberlands on the Property and further provided that Granting Owner/Owner may not benefit from any compensation or credits available through such programs or agreements in the event that such restoration

is required as a result of Granting Owner/Owner's violation of this Easement.] Granting Owner/Owner and Land Trust acknowledge that, because the conservation interests protected by this Easement shall not be adversely affected by any agreements, exchanges or trades, and the only interest affected shall be Granting Owner/Owner's interest, any compensation received by Granting Owner/Owner for such agreements, exchanges or trades shall be payable in its entirety to Granting Owner/Owner. Granting Owner/Owner and Land Trust acknowledge and agree that this reserved right does not include the right to exchange, trade, extract, license, lease, transfer, or sell topsoil, minerals, or water located on the Property.

> **Commentary.** Including examples in the paragraph aids in its later interpretation if there is a dispute as to the nature of the permitted activities. Consider whether to limit to a particular portion of the Property.

OR

(b) Property Resources Values—"Property Resources Values" shall mean value obtained through enhancement of the ecosystems or environments on the Property and/or value obtained through Granting Owner/Owner's refraining from exercising, in whole or in part, any Reserved Right. Property Resources Values include, but are not limited to mitigation or restoration credits for wetlands, forests, prairies, habitats, streams, cultural significance, energy, emissions, carbon sequestration, aquifer recharge, water quality, nutrients, and endangered species habitat or any other similar currency or credit asset for which a market may now or later come to exist. Owner reserves the right to manage or enhance the Conservation Values and/or to refrain, in whole or in part, from exercising Reserved Rights [(including rights to conduct Forest Management Activities),] and to sell any Property Resources Values based upon and associated therewith, provided any such sale shall not physically harm the Property's Conservation Values and shall not be inconsistent with the Purpose of this Easement. For example, Granting Owner/Owner may create a mitigation bank or participate with others to create a mitigation bank based upon the Reserved Rights in a portion of the Property's carbon sequestration value or watershed value and receive compensation for the sale of credits from such bank.

> **Commentary.** If included, "Forest Management Activities" must be defined in another paragraph. Consider for all of these whether Land Trust or Owner should receive the compensation and revise as appropriate and/or move to the section on land trust rights. Consider whether to limit to a particular portion of the Property.

OR

(b) Mitigation Programs—Subject to Land Trust's prior written consent, not to be unreasonably withheld, conditioned or delayed, the right to participate in, and retain any income received therefrom, any current or future programs with state or federal agencies or private entities intended to provide incentive or

compensation for the restoration or relocation of rare, imperiled, threatened, or endangered species or communities on the Property in a manner designed to restore historic natural systems, or for other environmental preservation or enhancement efforts (including, for example, wetland mitigation, carbon credit, and similar programs), provided such program is consistent with the Purpose of this Easement and enhances the Conservation Values.

> **Commentary.** Consider who should receive the compensation and revise as appropriate and/or move to the Land Trust rights paragraph. Consider whether to state specific factors to be considered in granting or denying consent and/or to grant Land Trust more discretion.

OR

(b) Natural Resource Benefits—Granting Owner/Owner reserves the right to sell, trade, or exchange quantifiable natural resource benefits associated with the Property, provided that such sales, trades, or exchanges are exercised in a manner that is consistent with this Easement. Such agreements, and any management of such natural resources in accordance with such agreements, or to accomplish such sales, trades or exchanges, shall be subject to this Easement, and Granting Owner/Owner shall at all times remain responsible for compliance with this Easement. [One example of such agreement, sale, trade or exchange is one under which Granting Owner/Owner receives compensation, including transferable credits, for participating in a greenhouse gas emissions offset program. Another example would be agreeing to restore, enhance or manage endangered species habitat as part of a conservation banking or credit program, provided Granting Owner/Owner may not benefit from any compensation or credits available through such programs or agreements in the event that such restoration is required as a result of Granting Owner/Owner's violation of this Easement.] The Parties acknowledge that, because the conservation interests protected by this Easement shall not be adversely affected by such agreements, exchanges or trades, and the only interest affected shall be Granting Owner/Owner's interest, any compensation for such agreements, exchanges or trades shall be payable in its entirety to Granting Owner/Owner.

(13) Recreational Uses. Owner retains the right to use and to permit others to use the Property for otherwise lawful noncommercial [and nonmotorized] recreational uses, including, but not limited to, hiking, cross-country skiing, birdwatching, meditating, observing and photographing nature, walking, picnicking, resting, education and _____ that are consistent with the purposes of this Easement. Owner retains the right to use and to permit others to use the Property for passive, non-intrusive, and non-commercial recreational or educational purposes that require no significant surface alteration or other development of the land. Such uses may include, but are not limited to hiking, horseback riding and nature study. All commercial recreational uses of, or commercial recreational activities on, the Property are prohibited. The terms "**commercial recreational uses**" and "**commercial**

recreational activities" shall mean uses or activities that are typically recreational in nature for which users are charged a fee in excess of the property owner's costs for the privilege of engaging in the uses or activities.

> **Commentary.** Consider defining passive recreation: ""Passive Recreation," or "Passive Recreational" as the context may require, means low-impact activities conducted outdoors, including nature study, bird watching, orienteering, hunting, fishing, hiking, boating, horseback riding, camping, and cross country skiing." Some may debate whether hunting, horseback riding and cross country skiing should be included. Perhaps set out activities that are not passive recreation to aid those applying the definition in the future.

AND?
All commercial [non-passive] uses are prohibited.

OR
To the extent required to qualify for exemption from federal estate tax under §2031(c) of the Internal Revenue Code, Owner agrees that commercial recreational uses are not permitted within the Property.

AND?
Resort structures, golf courses, non-residential swimming pools, public or commercial airstrips, commercial equestrian facilities, public or commercial helicopter pads, athletic fields, and any other nonagricultural recreational structures or facilities are prohibited on the Property.

OR
Under no circumstances shall athletic fields, golf courses or ranges, airstrips or helicopter pads be constructed on the Property.

AND?
Owner may place various removable, non-permanent, non-residential items on the Property, including wooden picnic tables or benches, [a wood sleeping platform no larger than ____ feet by ____ feet in dimension, shade structures], sculpture or environmental artworks, and other items of a similar nature. Placement or removal of materials that requires crossing the wet meadow with a vehicle is permitted only during the dry season (typically late summer and fall) when the ground is hard enough that no ruts or enduring tracks are created. During such crossings, natural vernal pools shall be strictly avoided.

AND?
Other buildings and facilities for any other private recreational use may not be built on the Property without the advance written approval of Land Trust as provided herein.

(14) Hunting, Trapping and Guns. Hunting or trapping is prohibited, except with the prior written consent of Land Trust, such consent to be given only to the extent necessary to control non-native species or disease on the Property, to maintain the ecological balance of native wildlife on the Property, or for ecological research as permitted herein. [Owner reserves the right to conduct limited, noncommercial

hunting, trapping and target shooting activities on the Property.] All other use of guns and any other weapons, target shooting with guns or any other weapons, use of explosives and fireworks are prohibited.

Commentary. Consider whether monitoring difficulty outweighs the benefit of this provision. Reasonable deer hunting may be desirable to keep deer population at a level consistent with Conservation Values. It may be necessary to hunt a mountain lion that has developed a taste for humans. Consider whether to address bows and arrows or to deem them included in "other weapons." Consider whether to permit hunting for food.

(15) Amplified Sound and Outdoor Lighting. The use of amplified sound systems audible outside Development Zone that may harass or harm wildlife is prohibited. Outdoor lighting shall not result in any light visible off of the Property that is inconsistent with the rural character of the Property and the surrounding landscape.

Commentary. Consider whether monitoring difficulty outweighs the benefit of this provision.

(16) Other Activities. _____

Commentary. Think about all the possibilities and try to address any that are plausible or possible. Some examples are set out below. Consider whether monitoring difficulty outweighs the benefit of these provisions. Consider night lighting, access by large mowing equipment, emergency vehicle access, the size of any parking area, need for public bathrooms, rubbish cans, supporting facilities.

(a) Ecological/Scientific Research—Owner may engage in and permit others to engage in ecological research on the Property that is consistent with the intent of this Easement provided that Land Trust's approval is obtained as provided herein if the research is more than merely observational.

(b) Educational Activities—Owner may carry out educational activities related to the agricultural use of the Property, including but not limited to educational activities addressing the subjects of sustainable agriculture, food production and nutrition, environmental conservation, and ecology.

Commentary. Consider whether to make it clearer that this permission is limited to Owner or extends to others. If the latter, consider whether Land Trust may need oversight options through prior notice, approval, contract review or other means.

(c) Weddings and Events—Weddings, parties, picnics, hikes and other gatherings with over _____ attendance are prohibited. [No more than _____ persons may use the Property on any single day.]

Commentary. Consider whether monitoring difficulty outweighs the benefit of this provision. Is Owner to be entitled to make money on these activities? If so, the money may encourage more frequent and larger activities than the land can carry and may require more significant controls. If not, Owner is unlikely to permit the activities for strangers. Uses of the land for profit can be discovered with Internet searches because the advertisements are easily found. Annoyed

neighbors are likely to report frequent events, and their impact will be visible at time of monitoring.

(d) Optional Management Plans—In addition to any management plans required by this Easement for the exercise of specifically reserved rights, Owner and Land Trust may mutually agree on a management plan for the Property intended to implement the provisions of this Easement, including but not limited to the initiation or continuation of activities requiring Land Trust's prior approval, for a specified period not to exceed _____ years. Neither this provision nor any management plan agreed to by the Parties shall be construed to modify this Easement.

Commentary. Depending on the nature of the land, level of anticipated use, and likelihood of change over time, Owner and Land Trust may be better served by an easement that sets clear boundaries of permitted and prohibited activities, defines a framework for addressing other activities to determine the extent to which they may be appropriate and then leaves the details to a management plan that can be revised over time to fit the changing needs and circumstances.

(e) Use of Pesticides and Herbicides—Spraying or other application of herbicides, pesticides, rodenticides or other chemicals or materials designed or intended to kill, eradicate, and/or eliminate plants, animals, or insects or that have that effect is permitted on the Property only as specified in this subparagraph and in strict compliance with the requirements noted:

(i) Spraying or other application of materials that are generally available for non-commercial household uses and in accordance with the manufacturer's recommendations and applicable laws and regulations is permitted in the Development Zone.

(ii) Spraying or other application of materials that are generally available for non-commercial household uses, in accordance with the manufacturer's recommendations and applicable laws and regulations, and in the minimum fashion required to kill, eradicate or eliminate invasive plants, is permitted with the prior written permission of Land Trust.

(iii) Spraying or application is otherwise permitted only with the prior written permission of Land Trust, upon its determination, in its sole and exclusive discretion, that such spraying or application is necessary to avoid greater harm to important conservation values protected by this Easement.

(f) Invasive Plant Removal—Owner may remove plants recognized as invasive by _____ or by Land Trust so long as _____.

Commentary. Consider whether to require prior approval, to limit the size or location of the area affected or the methods used, to limit the types or size of

plants removed, to address the impact on native species. In some circumstances (e.g., high value agricultural land), Owner's interests and concerns are likely to be aligned with those of Land Trust, so there is less need for specificity and control. In other cases, as when protected riparian areas grow tall enough to obscure Owner's view, Owner may use a liberal provision to harm valued habitat and cause erosion.

(g) Future Technology – No use shall be made of the Property, and no activity thereon shall be permitted that is or is likely to become inconsistent with the Purposes of this Easement. Owner and Land Trust acknowledge that, in view of the perpetual nature of this Easement, they are unable to foresee all potential future land uses, future technologies, and future evolution of the land and other natural resources, and other future occurrences affecting the Purposes of this Easement. Land Trust therefore, in its sole discretion, may determine whether (a) proposed uses or proposed improvements not contemplated by or addressed in this Easement or (b) alterations in existing uses or structures, are consistent with the Purposes of this Easement.

Commentary. If you are unable to negotiate the sole discretion standard, then consider a mutual agreement standard. At minimum articulate a review standard that does not bind Land Trust to be objectively reasonable. Reasonableness is highly circumstantial and subjective. In this instance, Land Trust need the ability to determine what is consistent with the conservation purposes and values without reference to economic or contractual reasonableness.

(17) Right to Privacy/Prevention of Trespass. Owner retains the right to privacy and the right to exclude any member of the public from trespassing on the Property. [Owner shall undertake all reasonable actions to prevent the unlawful entry and trespass by persons whose activities may degrade or harm the Conservation Values of the Property.]

Commentary. Imposing affirmative obligations on an owner, especially subsequent owners, presents potential problems and may not be enforceable. Some owners may seek to shift the burden of addressing trespassers to the land trust.

(18) Acts of God. Owner may undertake the [clearing and] restoration of land, watercourses, roads, and other structures that have been damaged by fire, flood, earthquake, wind or other natural or human-induced forces. Where possible, forest, shrub, and herbaceous cover damaged by such forces shall be restored with native species appropriate to the site. Under no circumstances shall non-native plants be intentionally introduced outside of the Development Zone. [Unless otherwise specified, nothing in this Easement shall require Owner to take any action to restore the condition of the Property after any act of God[or other [unforeseeable] event over which Owner had no control].]

Commentary. An owner needs to be able to act following a natural disaster, but some owners may use the disaster as an excuse to engage in activities prohibited by the

easement and harmful to Conservation Values. Note a provision under the enforcement paragraphs captioned "Natural Events Beyond Owner's Control."

(19) Home Occupations. So long as otherwise consistent with the Conservation Values, persons lawfully residing on the Property may engage in "**home occupations,**" that occur exclusively inside the home as that term is defined in and subject to all conditions provided in the then current local, state and federal law. Any physical change required outside the home to accommodate the home occupation is subject to prior written approval of Land Trust.

Commentary. Do not include if there are no residential uses permitted. Consider whether to fix the home occupations to those permitted to current law or to permit this provision to float with changes in the law. If the law existing at the time of the easement is to govern, provide copies of the relevant provisions attached as an exhibit; alternatively, provide for the law to apply together with any amendments or recodifications applicable thereafter.

(20) Wind, Solar, and Hydropower Energy. To the extent permitted by, and in accordance with, all then-applicable laws, regulations, and requirements, Owner may place or construct facilities for development and utilization of wind, solar, and hydropower energy resources for [residential] use principally on the Property; provided, however, that there shall be no more than _____ structures

Commentary. The opening clause is often used but is essentially redundant as the Owner must comply with law in any event.

that may be located within the "Energy Zone" depicted on Exhibit __

that may be located anywhere on the Property except in the _____

that may not be located in any location where visible from _____ Road

that may be no more than _____ feet in height.

Installation of wind, hydropower, and solar energy structures shall be with prior Land Trust approval as provided herein, , and Land Trust shall take into consideration the impact on scenic and ecological Conservation Values. All plans, construction and distribution contracts and other agreements shall be made expressly subordinate to this Easement and to the rights of Land Trust to protect the Conservation Values in perpetuity. . Owner and Land Trust hereby agree this paragraph is a reasonable restriction under state and federal law.

Commentary. Omit one or more of wind, solar, and hydropower as appropriate. Consider the risks and benefits of relying in part on "then applicable" laws when their content is unknown when drafting the Easement. Impose any necessary restrictions or limitations in the Easement without assuming laws in the future will do so. The reference to use "principally on the Property" arises from the fact that connection to the electric grid means that excess electricity at any point will flow off the Property while insufficient electricity will be drawn from the grid. The requirement that the facilities be designed to produce electricity for use principally on the Property imposes a limit on size and scope of the facilities. Some States limit restrictions on solar power facilities, see California

Civil Code §714, and this wording attempts to ensure some Land Trust control over placement and size despite those limitations. Any of these facilities can have significant impacts on conservation values, so the permission should be drafted to minimize the impact to the extent possible.

OR

(20) Wind, Solar, and Hydropower Energy. Small-scale facilities for the generation and transmission of electrical power may be built on the Property only with the approval of Land Trust. Owner and Land Trust hereby agree this paragraph is a reasonable restriction under state and federal law.

OR

(20) Renewable Energy Generation. The construction, use, maintenance, repair and replacement of _____ turbine(s) for the generation of wind energy shall be permitted exclusively, but only upon receipt of Land Trust's prior written approval (to be granted, conditioned or withheld in its sole discretion). When considering whether to issue such approval, Land Trust shall weigh and evaluate, among other relevant factors, the overall aesthetic impacts of the proposed turbine(s) in the context of the surrounding landscape, the environmental impacts, and the scope of its anticipated energy benefits, and, upon Land Trust's request, Owner shall be required to provide Land Trust with written documentation addressing these and other matters deemed relevant by Land Trust.

Commentary. Depending on the circumstances, include height, footprint and other limitations and consider whether to limit the location to a portion of the Property.

OR

(20) Renewable Energy Generation.

[(a) Commercial Energy Production—Subject to subparagraph (b) below,] Granting Owner/Owner retains the right to construct geothermal, wind, and solar generation facilities for commercial transmission, distribution or sale ("**alternative energy production**"). Any alternative energy production and distribution facilities, including transmission lines, permitted hereunder must be consistent with protection and preservation of the Conservation Values. If Granting Owner/Owner proposes to engage in alternative energy production, Granting Owner/Owner must prepare for Land Trust's review and written approval as provided herein, an alternative energy production plan that explains, at a minimum, siting, size, height, generation capacity, location of distribution lines, and other relevant information required by Land Trust to ensure compatibility of the alternative energy production plan with protection of the Conservation Values. All energy production plans and distribution contracts and agreements approved by Land Trust must be made expressly subordinate to the rights of Land Trust in this Easement to protect the Conservation Values in perpetuity.

(b) Possible Future Commercial Energy Production—As of the date of this Easement, Granting Owner/Owner and Land Trust mutually agree that current technology for commercial wind and solar energy generation, using tall and visually intrusive wind turbines and large arrays of solar panels, is incompatible with protection of the Conservation Values, and, therefore, commercial alternative energy production using such technology is prohibited. If alternative energy production technology changes in the future so that alternative energy production on a commercial scale is compatible with protection of the Conservation Values, Owner may seek Land Trust's approval of an alternative energy production plan in accordance with subparagraph (a).

(c) Noncommercial Energy Production for Use on the Property—Owner retains the right to construct geothermal, wind, and solar generation facilities for noncommercial uses solely on the Property, except that any incidental surplus electricity may be sold commercially or credited to Owner's utility service (net metering). Because of the potential impact on riparian areas and other protected Conservation Values, Owner may only generate hydroelectricity for use on the Property with the prior approval of Land Trust as provided herein.

OR

(20) Renewable Energy/Ancillary Improvements—Without permission from Land Trust, other improvements, including, but not limited to, facilities for the generation and transmission of electrical power, such as windmills and/or [detached] solar arrays may be built exclusively within the Building Envelope. Generation of any electrical power shall be principally for use on the Property. Ancillary improvements constructed within the Building Envelope count toward the impervious surfaces limitation as set forth herein. Construction of telecommunications towers is prohibited. All energy production plans, construction and distribution contracts and other agreements must be made expressly subordinate to this Easement and to the rights of Land Trust in this Easement to protect the Conservation Values in perpetuity.

> **Commentary.** Limit to particular types of improvements if appropriate. Consider whether to identify the location of these improvements even within the Building Envelope, if large or visible to the public or likely to impact wildlife to minimize impact on conservation values. Depending on the circumstances, specify height, footprint and other limitations on the improvements and consider including a Land Trust approval requirement or a pre-construction notice requirement. Consider whether to permit telecommunications towers that are built as part of the other structures.

OR

(20) Ancillary Improvements—Other improvements, including, but not limited to, facilities for the generation and transmission of electrical power, such as a windmill and/or methane digesters may be built on the Property only for the use on the Property and only with the approval of Land Trust, as provided herein.

Commentary. Identify the location of these improvements if possible to minimize impact on conservation values. Depending on the circumstances, specify height, footprint and other limitations. Consider whether the limit to use strictly on the Property is appropriate or should be extended to adjacent properties under common ownership or another extension.

OR

(20) Alternative Energy/Communications Structures and Improvements – Structures and improvements necessary to undertake alternative energy activities such as wind, solar, methane and other similar energy generation activities as well as communications facilities such as cell towers or 911 communications towers are permitted as further described below, so long as they are compatible with the Purposes of this Easement, subordinate to the _____[conservation]_____ use of the Property and located in a manner that minimizes the impact to _____[primary conservation attributes, prime or statewide important soils, scenic, riparian, habitat, etc.]_____.

(a) Building Envelope: Within the Building Envelope, Owner may construct structures and improvements limited to flat rooftop panels [and _____] without permission of Land Trust. Other structures and improvements require prior Land Trust approval as set out herein.

Commentary. Structures that can be concealed inside on immediately adjacent to existing structures, such as a communications tower that can be inside a silo, may also be permitted without Land Trust approval.

(b) _____ Area: Subject to the impervious surface coverage limitations set forth herein and the requirement that they affect no more than __ percent of the _____ Area, such structures and improvements may be built in the _____ Area with the prior approval of Land Trust as set out herein. Land Trust may condition approval upon the posting of a bond providing _____.

Commentary. The size, nature and duration of the bond would depend on the structure. A bond may be appropriate for the construction period but less necessary thereafter. Consider also the need for any ongoing insurance obligation for Owner, for example, to address land restoration after a devastating storm. The size and character of the structure dictate the importance of a bond or ongoing insurance obligation.

(c) Location: Before selecting the location of any site for these structures and improvements, Owner shall give Land Trust an opportunity to participate in an onsite meeting to review proposed locations and any required roads by giving notice as provided herein. Owner shall comply with the _____ State Department of _____[Agriculture and Markets or Environment as appropriate]_____ guidelines for mitigation for impacts causes by construction and operation of such structures.

Commentary. This subparagraph is usually fine if the structure and road are confined to the Building Envelope. If not, or if the envelope is large, then selection of the location should be subject to Land Trust approval. If the Granting Owner has plans to build in the immediate future, then the plans should be defined more specifically in the Easement.

(d) Easement Governs: All plans, construction and distribution contracts and other agreements shall be made expressly subordinate to this Easement and to the rights of Land Trust to protect the Conservation Values in perpetuity.

OR

(20) Community Commercial Wind Generation—The _____[insert general location, e.g., "ridge line at the northeast corner" or more specific designation, identify on map exhibit]_____ on the Property may have a sufficient wind resource to be suitable for the generation of electric power. Owner and Land Trust may elect to explore wind energy production collaboratively employing ___[one/ up to _____ /no more than _____] wind turbines in partnership with _____ community with the objective of providing energy to that community and not principally for economic gain. Any such wind energy project, including the scale, location and all other conditions, shall require the prior written approval of both Owner and Land Trust, and either party may in its sole discretion withhold or condition said approval.

Commentary. Provide for allocation of any economic benefit. Consider any limits on the size or footprint of the turbines.

OR

(20) Possible Future Commercial Energy Production—As of the date of this Easement, Granting Owner and Land Trust mutually agree that current technology for commercial wind and solar energy generation, using tall and visually intrusive wind turbines and large arrays of solar panels, is incompatible with protection of the Conservation Values, and, therefore, commercial alternative energy production using such technology is prohibited. If alternative energy production technology changes in the future so that alternative energy production on a commercial scale is compatible with protection of the Conservation Values, Owner may seek Land Trust's approval of an alternative energy production plan in accordance with _____ and taking into consideration the impact on scenic and ecological Conservation Values. All plans, construction and distribution contracts and other agreements shall be made expressly subordinate to this Easement and to the rights of Land Trust to protect the Conservation Values in perpetuity.

Commentary. Set out the limitations and conditions suit the land and circumstances.

(21) Domestic and Wild Animals. To the extent permitted above, Owner retains the right to graze livestock or any other domesticated or farm animals on the Property. [Owner retains the right to graze any livestock on the Property, subject to such restrictions as may be necessary to maintain the health of native vegetation.]

Owner retains the right to remove or control specific feral animals [or feral animal species] that threaten human health, safety or welfare or Conservation Values, using techniques that minimize harm to native wildlife including methods approved by local, state or federal natural resource management agencies, shooting or trapping non-native animals.

> **Commentary.** Restrict numbers or kinds of domestic animals? Limit domestic animals to a portion of the Property, to the Development Zone? Review the provisions on fencing to be sure they are consistent with the limitations on animals. Be consistent with earlier provisions on livestock. If numbers of animals are difficult, consider using AUMs (animal unit month defined by NRCS – see http://www.thecattlesite.com/articles/1129/using-the-animal-unit-month-aum-effectively). On the wild animals, limit the permission to remove or control to non-native animals? What about bear, lion, rabid skunks or rabid bats? What about insects such as Africanized bees or fire ants? What about even native animals and insects that may pose dangers or problems in the immediate residential areas? Be sure to be consistent with (14) if that paragraph is also used. Consider whether to have a notice or approval requirement for some or all of the activities here. Are small animal kennel operations prohibited or permitted?

(21) Grazing. Granting Owner does not graze or pasture domestic animals or livestock on the Property for commercial purposes at the time of granting this Easement. Owner may graze and pasture domestic animals and livestock in existing fields and pastures for recreational purposes, for fire protection, or to qualify the Property for the most favorable property tax treatment under _____[applicable law]_____ so long as consistent with this Easement. Owner will notify Land Trust in writing ____ days before starting any commercial grazing activity and provide Land Trust a pre-approved USDA Natural Resource Conservation Service ("NRCS") or similar grazing management plan prescribing recommended stocking densities for approval by Land Trust. Upon ____ days written notice by Land Trust that the approved grazing plan interferes with the Conservation Values, Owner must reduce the number of domestic animals and/or livestock on the Property to a level deemed satisfactory by Land Trust. An existing approved grazing plan shall continue in effect until a new plan is approved. If there is any conflict between the grazing plan and this Easement, this Easement shall control.

> **Commentary.** Restrict numbers or kinds of domestic animals? Limit domestic animals to a portion of the Property, to the Development Zone? Review the provisions on fencing to be sure they are consistent with the limitations on animals. If numbers of animals are difficult, consider using AUMs (animal unit month defined by NRCS – see http://www.thecattlesite.com/articles/1129/using-the-animal-unit-month-aum-effectively). Be sure to be consistent with (14) if that paragraph is also used. Consider whether to use a prior notice requirement as set out or a prior approval requirement—the choice may depend on the character of the land and the fragility of its plants and animals, the potential harm, the desires of the donor, and all the other pertinent circumstances.

(22) Boundaries. Owner is obligated to identify the boundaries of the Easement, any Development Zone and any other area specially recognized in this

Easement before undertaking any actions that are restricted by this Easement within or without the boundaries in question. If Owner fails to do so, Land Trust has the right to require a survey of the relevant lands, at Owner's cost, if necessary to determine whether Owner's land use activity is in compliance with this Easement.

Commentary. See Land Trust *Standards and Practices* 9D.

(23) Reserved Rights Exercised to Minimize Damage. All rights reserved by Owner or activities not prohibited by this Easement shall be exercised so as to prevent or to minimize damage to the Conservation Values identified above and water quality, air quality, land/soil stability and productivity, wildlife habitat, scenic and cultural values, and the natural topographic and open space character of the Property.

5. **Notice and Approval Processes.**

(1) Notice of Intent to Undertake Activities or Uses. In addition to notice and[/or approval requirements] set forth in paragraphs _____, Owner must notify Land Trust and obtain approval before undertaking activities or uses (1) not documented in the Baseline, (2) not affirmatively permitted herein or (3) inconsistent with Conservation Values this Easement is intended to protect [about which Owner is uncertain as to their adverse impact on Conservation Values].

Commentary. See Land Trust *Standards and Practices* 11F. This requirement can be very onerous if the Baseline is poorly prepared so that many activities and uses are not documented adequately, if the permissions are cryptically worded so that there can be debate as to what is actually permitted, and if the Conservation Values are inadequately identified. Owners acting in good faith can be wrongly accused of violation, and land trusts can be subject to criticism from third parties for failure to enforce easements.

(a) Purpose—Notice affords Land Trust an opportunity to determine whether the proposed activities or uses are permitted under this Easement and, if so, to ensure that they are designed and carried out in a manner that is consistent with this Easement, as well as to enable Owner to engage in permitted activities confident that they create no unintended violations.

(b) Application—Owner shall submit a written description of the proposed activity or use (an "**Application**") explaining its nature, scope, design, location, timetable, and other material aspects in sufficient detail to permit Land Trust to make an informed judgment.

(c) Initial Response—Within ___ days after receipt of the Application, Land Trust shall inform Owner in writing whether the Application is complete or whether additional, specified information is required for a complete Application.

(d) Costs—If Land Trust reasonably determines that (i) the advice of a consultant such as an engineer, ecologist, attorney or surveyor is necessary to determine whether an Application is complete and/or to assist Land Trust in reviewing the Application, or (ii) more than 10 person-hours of Land Trust's personnel will be

or have been spent annually responding to Application(s) submitted by Owner, a fee based upon Land Trust's estimate of costs of consultants and/or Land Trust personnel (collectively "**Land Trust's Costs**"), Owner shall pay Land Trust's Costs upon notification of the amount or withdraw the Application. If payment is made, Land Trust's time to determine that the Application is complete shall be extended until the consultant's work, if any, is done. If payment is not made, the Application is deemed denied. After Land Trust completes its response to the Application, Land Trust shall submit a final statement of the aggregate amount of Land Trust's Costs, and appropriate adjustments shall be made at that time.

(2) Land Trust's Approval. When Land Trust's approval is required or sought as set forth herein, Land Trust shall grant or deny approval in writing within ___ days after receipt of Owner's complete Application. Criteria that Land Trust may consider include, without limitation, compliance with the provisions of this Easement, the capability of the proposed activity or use to preserve and enhance Conservation Values, the manner in which the proposed activity or use is to be carried out, and its likely effect upon Conservation Values. Land Trust's approval may be withheld upon a good-faith determination by Land Trust that there is a significant risk that the activity or use as proposed would be inconsistent with the purposes of this Easement. Approval or disapproval is within the sole discretion of Land Trust, and approval may only be granted upon conditions that tend to further [will not harm] the Conservation Purpose of this Easement. Failure of Land Trust to respond to a notice of intention within ___ days of receipt of that notice shall constitute a denial [unless Owner promptly sends a second notice of intention by certified mail, postage prepaid, return receipt requested, and an additional ___ days have expired without a response, in which case the request is deemed approved].

AND?
Land Trust shall grant permission or approval to Owner only where Land Trust, acting in Land Trust's sole [reasonable] discretion and in good faith, determines that the proposed action will not significantly diminish or impair the agricultural productive capacity and open space character of the Property and would not cause significant soil degradation or erosion.

(3) Inspection and Certification. Upon completion of any use or activity of limited duration, or upon commencement of any use or activity of unlimited duration, as the case may be, Land Trust shall, at the request of Owner, inspect the Property and, if the action was performed in accordance with this Easement and Land Trust's approvals or consents issued hereunder, issue a certificate to that effect, dated as of the time of inspection. Land Trust shall be fully reimbursed by Owner for all costs, including reasonable professional fees of surveyors, attorneys, consultants, Land Trust staff, and accountants, incurred in servicing Owner's request.

(4) Discretionary Approval. In limited circumstances, Land Trust may give written permission to Granting Owner/Owner to engage in activities that have impacts

on the Conservation Values but that do not conflict with the conservation purposes of this Easement. Land Trust may give its permission only if it determines, in its sole discretion, that such activities (1) do not violate or are not in conflict with the general and specific purposes of this Easement AND (2) either enhance or do not significantly impair any Conservation Value protected by this Easement. Any discretionary consent given by Land Trust under this Paragraph must be delivered by Land Trust to Granting Owner/Owner in writing before Granting Owner/Owner may engage in the proposed activity, and such consent shall be (a) revocable at Land Trust's discretion, (b) limited in duration; and (c) specific to the individuals or entities who have requested permission to engage in the activity. Notwithstanding the foregoing, Land Trust will not agree to any activities that would result in the amendment or termination of this Easement under state or federal law. Granting Owner/Owner understands and agrees that Land Trust may not be compelled by legal action or otherwise to give consent to any request made under this Paragraph. Nothing in this section shall require Land Trust to consent to any activity otherwise restricted in this Easement, or compel Land Trust to consult or negotiate regarding the withholding or provision of such consent.

> **Commentary.** Use this provision, if at all, only with caution. In many circumstances, it would increase the danger of violations under an owner's "easier to ask for forgiveness than permission" approach to life, and it is likely to increase the number of requests and the expense of stewardship. If used, consider limiting its availability to the Granting Owner.

(5) Notice of Land Trust's Obligations. If Land Trust by action or inaction does not perform or fulfill any affirmative, non-discretionary obligation required of Land Trust pursuant to this Easement, then Owner may give written notice of that obligation to Land Trust as provided herein, and the Parties shall cooperate and act in good faith to reach a resolution with respect to the obligation.

OR, A DIFFERENT SET OF PROVISIONS ON APPROVAL:

5. **Land Trust's Approval or Withholding of Approval.**

(1) **General.** When Land Trust's approval is required, Land Trust shall grant or withhold its approval in writing within sixty (60) days of receipt of Owner's written request therefor. In the case of withholding of approval, Land Trust shall notify Owner in writing with reasonable specificity of the reasons for withholding of approval, and the conditions, if any, on which approval might otherwise be given. Failure of Land Trust to respond in writing within sixty (60) days shall be deemed to constitute written approval by Land Trust of any request submitted for approval that is not contrary to the express restrictions hereof.

(2) **Land Trust Approval of Certain Uses or Activities.** Any use or activity permitted under paragraph ___, or any ____[Agricultural/Forest/Other]_____ Management Plan required under paragraph ___, shall be subject to the prior approval of Land Trust. Owner shall request such approval in writing and shall include

therewith information identifying the proposed activity and the reasons for the proposed activity with reasonable specificity. Land Trust's evaluation of the request shall generally take into account the criteria included at paragraphs _____ as they relate to the activity itself as well as to the site for the proposed activity, and Land Trust's approval or permission, as the case may be, shall not be unreasonably withheld.

(3) **Land Trust Approval of Sites.** The exercise of any right to _____ _____ shall be subject to the prior approval by Land Trust of the site for that proposed activity. Owner shall request approval in writing and shall include therewith information identifying the proposed site with reasonable specificity, evidencing conformity with the requirements of the applicable paragraphs under which the right is reserved hereunder, and, when applicable, evidencing conformity with existing land use regulations. Land Trust's approval, which shall not be unreasonably withheld, shall take into account the following criteria:

(a) the extent to which use of the site for the proposed activity would impair the scenic qualities of the Property that are visible from public roads;

(b) the extent to which use of the site for the proposed activity would destroy an important habitat or would have a material adverse effect on the movement of wildlife;

(c) the extent to which use of the site for the proposed activity would impair water quality;

(d) in the case of any proposal to build new structures, the extent to which new road construction would be necessary to provide access to the site;

(e) in the case of any proposal to build new structures or roads, the extent to which the scenic quality of the Property may be adversely impacted;

(f) the extent to which the proposed activity or use of the site for the proposed activity would otherwise significantly impair the conservation values of the Property.

Owner and Land Trust shall cooperate and shall act in good faith to arrive at agreement on suitable sites in connection with any determinations that are necessary to be made by them (either separately or jointly) under this paragraph. Notwithstanding the foregoing, Land Trust's approval of a proposed site or activity shall be withheld if the site for the proposed activity would interfere with the essential scenic quality of the Property.

(4) **Notice to Land Trust.** Following the receipt of Land Trust's approval when required under paragraph (2) or paragraph (3), and not less than thirty (30) days prior to the commencement of any use or activity approved under paragraph (2) or (3), Owner agrees to notify Land Trust in writing of the intention to exercise such right. The notice shall describe the nature, scope, location, timetable, and any other material

aspect of the proposed activity in sufficient detail to permit Land Trust to monitor such activity. If not provided to Land Trust under paragraph (3), the notice shall also include information evidencing the conformity with the requirements of the applicable paragraphs under which the right is reserved hereunder, and, when applicable, evidencing conformity with existing land use regulations. At Land Trust's sole discretion, Land Trust may permit commencement of the activity less than thirty (30) days after receiving Owner's written notice. See also paragraph __, with respect to Owner's written notice to Land Trust concerning a transfer of any interest in all or a portion of the Property.

6. Land Trust's Remedies. Land Trust may take all actions that it deems necessary to ensure compliance with this Easement. Land Trust shall have the right to prevent and correct violations of this Easement. If Land Trust finds what it believes is a violation, it may at its discretion take appropriate legal action to ensure compliance with this Easement and shall have the right to correct violations and prevent the threat of violations.

Commentary. Note that this section 6 is specifically devoted to remedies available to Land Trust. An alternative approach would be to expand and revise this section to cover all remedies, for Land Trust and Owner, and to include the arbitration or mediation paragraphs that appear in the general provisions at the end of the databank.

(1) Notice of Violation; Corrective Action. If Land Trust determines that a violation or potential violation of this Easement has occurred or is threatened, Land Trust may give written notice to Owner of such violation and demand corrective action sufficient to cure the violation within a specified time appropriate to the circumstances and, when the violation involves injury to the Property resulting from any use or activity inconsistent with the purposes of this Easement, to restore the portion of the Property so injured to its prior condition in accordance with a plan approved by Land Trust.

AND?

Upon receipt of such notice, Owner shall have ___ days in which to respond to Land Trust and to commence such corrective action as may be necessary to cure the violation or restore the Property. Should Owner fail to respond or to commence corrective action within the __-day period and thereafter diligently pursue the corrective action, Land Trust may exercise any other remedies provided herein, or at law or in equity. This period to cure shall only apply if the actions constituting the alleged violation have been suspended.

(2) Injunctive Relief. If a court with jurisdiction determines that a violation may exist or has occurred, Land Trust may obtain an injunction, specific performance, or any other appropriate equitable or legal remedy. A court may also issue an injunction requiring Owner to restore the Property to its condition prior to the violation. In any case where a court finds that a violation has occurred, Owner shall reimburse Land Trust for all its expenses incurred in stopping and correcting the violation,

including but not limited to reasonable attorney fees. Failure of Land Trust to discover a violation or to take immediate legal action shall not bar it from doing so at a later time. Land Trust's remedies under this section shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity or otherwise. Land Trust may seek preliminary injunctive relief even though the dispute is to be arbitrated.

> **Commentary.** Seeking the suspension of a building permit or other administrative action may be best way to stop construction An additional sentence may be added: "Except when an ongoing or imminent violation could irreversibly diminish or impair the agricultural productive capacity and open space character of the Property, Land Trust shall give Owner written notice of the violation or potential violation, and ___ days to correct it, before filing any legal action."

(3) Damages. Land Trust shall be entitled to recover damages for violation of this Easement or injury to any of the Conservation Values protected by this Easement, including, without limitation, damages for the loss of scenic, aesthetic, or environmental values. [Without limiting Owner's liability therefor, Land Trust shall apply any damages recovered in such manner as Land Trust shall determine in its sole discretion to the costs of monitoring and enforcing this Easement and undertaking any corrective action on the Property.]

(4) Emergency Enforcement. If Land Trust, in its sole discretion, determines that circumstances require immediate action to prevent or mitigate significant damage to Conservation Values, Land Trust may pursue its remedies under this paragraph and state law without prior notice to Owner or without waiting for the period provided for cure to expire.

(5) Scope of Relief. Land Trust's rights under this paragraph apply equally in the event of either actual or threatened violations of this Easement. Owner agrees that Land Trust's remedies at law for any violation of this Easement are inadequate and that Land Trust shall be entitled to the injunctive relief described herein, both prohibitive and mandatory, in addition to such other relief to which Land Trust may be entitled, including specific performance of this Easement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. Land Trust's remedies described in this paragraph shall be cumulative and in addition to all remedies now or hereafter existing at law or in equity. Land Trust's remedies are not intended to displace any other remedy available under this Easement, _____[state enabling act]_____, or any other applicable law. Land Trust may take such other action as it reasonably deems necessary to insure compliance with this Easement.

(6) Costs of Enforcement. All reasonable costs incurred by Land Trust in enforcing this Easement against Owner, including, without limitation, costs of suit and reasonable attorney fees, experts' fees and any costs of restoration necessitated by Owner's violation of this Easement shall be borne by Owner[; provided, however, that, if Owner ultimately prevails in a judicial enforcement action, Owner shall be entitled to

reimbursement for costs of suit and reasonable attorney fees].

Commentary. Some States, including California, mandate that a one-sided attorney fee clause is reciprocal. Cal. Civ. Code §1717.

(7) Forbearance. Land Trust, in the [reasonable] exercise of its sole discretion, may forbear to exercise rights under this Easement. Forbearance by Land Trust to exercise its rights under this Easement in the event of any breach of any term of this Easement by Owner shall not be deemed or construed to be a waiver, estoppel or laches by Land Trust of such term or of any subsequent breach of the same or any other term of this Easement. No delay in or omission of the exercise of any right or remedy upon any breach by Owner shall impair such right or remedy or be construed as a waiver, estoppel or laches.

OR

(7) Forbearance. If Land Trust does not exercise any or all of its enforcement rights upon the occurrence of an event constituting a violation of this Easement, that forbearance shall not to be interpreted as an agreement to postpone or to forbear the exercise its enforcement rights with respect to that occurrence or a future occurrence.

(8) Waiver of Certain Defenses. Owner hereby waives any defense of laches, waiver, estoppel, or prescription. In making this grant of Easement and in acquiring this Property, Granting Owner and subsequent Owners have considered the possibility that uses prohibited by this Easement may become more economically valuable than permitted uses and that neighboring parcels may be put to prohibited uses. All Parties intend that any such changes shall not be deemed circumstances justifying amendment or termination of this Easement.

(9) Change of Conditions. The fact that any use of the Property that is expressly prohibited by this Easement, or any other use as determined to be inconsistent with the purpose of this Easement, may become greatly more economically valuable than permitted uses, or that neighboring properties may in the future be put entirely to uses that are not permitted thereunder, has been considered by Granting Owner in granting this Easement and by Owners in acquiring this Property. It is their belief that any such changes will increase the benefit to the public of the continuation of this Easement, and it is the intent of Granting Owner, subsequent Owners and Land Trust that any changes should not be assumed to be circumstances justifying the termination or extinguishment of this Easement pursuant to this paragraph. In addition, the inability to carry on any or all of the permitted uses, or the unprofitability of doing so, shall not impair the validity of this Easement or be considered grounds for its termination or extinguishment pursuant to this paragraph.

Commentary. This provision or the much simpler one that follows can be tailored to the special situation of a particular easement when particular changes are foreseeable.

OR

(9) Change of Conditions. If one or more of the purposes of this Easement

may no longer be accomplished, such failure of purpose shall not be deemed sufficient cause to terminate the entire Easement as long as any other purpose of the Easement may be accomplished.

OR

(9) Natural Events Beyond Owner's Control—Nothing contained in this Easement shall be construed to entitle Land Trust to bring any action against Owner for any injury to or change in the Property resulting from natural causes beyond Owner's control, including fire, flood, storm, and natural earth movement, or other natural events, or from any prudent action taken by Owner in an emergency to prevent, abate, or mitigate significant injury to the Property resulting from such natural causes.

> **Commentary.** Consider whether to omit unless the donor asks for this provision. Act of God and emergency would be defenses to a claimed violation in many or all States, but there are likely variations in the scope and nature of the defenses.

OR

(9) Economic Hardship—In making this grant and in accepting ownership, Granting Owner and Owner have considered the possibility that uses prohibited by this Easement may become more economically valuable than permitted uses and that neighboring properties may in the future be put entirely to such prohibited uses. Both Owner and Land Trust intend that any such changes shall not be deemed to be circumstances justifying the termination or extinguishment of this Easement. In addition, the inability of any Owner to conduct or implement any or all of the uses permitted under this Easement, or the unprofitability of doing so, shall not impair the validity of this Easement or be considered grounds for its termination or extinguishment. Owner and Land Trust agree that global warming and climate change-caused effects shall not be a basis for termination of this Easement.

> **Commentary.** This provision could be included in the recitals.

(10) Cumulative Remedies. This description of Land Trust's remedies does not preclude Land Trust from exercising any other right or remedy that may at any time be available to Land Trust under this Easement or applicable law. If Land Trust chooses to exercise one remedy, Land Trust may nevertheless choose to exercise any one or more of the other rights or remedies available to Land Trust at the same time or at any other time.

7. **Public Access.** No right of access by the general public to any portion of the Property is conveyed by this Easement.

8. **Responsibilities of Owner and Land Trust Not Affected.** Other than as specified herein, this Easement is not intended to impose any legal or other responsibility on Land Trust, or in any way to affect any existing obligations of Owner as owner of the Property. Among other things, this principle shall apply to the following.

(1) Costs, Legal Requirements, and Liabilities. Owner retains and agrees to

bear all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, and operation of the Property. [Owner does hereby indemnify and hold Land Trust harmless therefrom.] Owner remains solely responsible for obtaining any applicable government permits and approvals for any construction or other activity or use permitted by this Easement, and all such construction or other activity or use shall be undertaken in accordance with all applicable federal, state, and local laws, regulations, and requirements. Owner shall keep the Property free of any liens arising out of any work performed for or materials furnished to Owner that might impair the effectiveness of this Easement in any way.

Commentary. Note that the agreement to indemnify may not be enforceable against subsequent owners.

(2) Subsequent Liens on Property. No provisions of this Easement shall be construed as impairing the ability of Owner to use this Property as collateral for future indebtedness.

(3) Subsequent Encumbrances. The grant of any easements or use restrictions that might diminish or impair the agricultural viability or productivity of the Property or otherwise diminish or impair the Conservation Values protected by this Easement is prohibited, except with the approval of Land Trust.

Commentary. Coordinate this provision with Paragraph 11(4) so one is omitted or both are consistent.

(4) Taxes. Owner shall be solely responsible for payment of all taxes and assessments levied against the Property. Owner shall pay before delinquency all taxes, assessments, fees, and charges of whatever description levied on or assessed against the Property by competent authority (collectively "**taxes**"), including, without limitation, any taxes imposed upon, or incurred as a result of, this Easement, and shall furnish Land Trust with satisfactory evidence of payment upon request. If Land Trust ever pays any taxes or assessments on the Property, or if Land Trust pays levies on Owner's interest in order to protect Land Trust's interests in the Property, Owner will reimburse Land Trust for the same.

Commentary. Some land trusts add a requirement for Owner to give notice of payment of taxes. This type of requirement is particularly appropriate in States that treat unpaid property taxes as a superpriority lien so that nonpayment can trigger a sale free and clear of the easement. Notice under the Easement enables Land Trust to learn the status of the payment with minimum effort. In most circumstances, Land Trust would receive notice of a sale pursuant to the foreclosure or judicial sale rules, but there will be significant costs in addition to the unpaid taxes at that late date.

(5) Upkeep and Maintenance. Owner shall be solely responsible for the upkeep and maintenance of the Property, to the extent it may be required by federal, state, and local laws, regulations and requirements. Land Trust shall have no obligation for the upkeep or maintenance of the Property. If Land Trust acts to maintain the Property in order to protect Land Trust's interest in the Property, Owner will reimburse

Land Trust for any such costs.

(6) Liability for Operations and Conditions. Land Trust shall have no responsibility for operation of the Property, monitoring of hazardous conditions on it, or protection of Owner, the public or any third parties from risks relating to conditions on the Property. Without limiting the foregoing, Land Trust shall not be liable to Owner or other person or entity in connection with consents given or withheld, or in connection with any entry upon the Property occurring pursuant to this Easement, or on account of any claim, liability, damage or expense suffered or incurred by or threatened against Owner or any other person or entity, except as the claim, liability, damage, or expense is the result of [negligence,] gross negligence, or intentional misconduct of Land Trust or its officers, directors, members, employees, or agents.

(7) Indemnification by Owner. In view of Land Trust's negative rights, limited access to the land, and lack of active involvement in the day-to-day management activities on the Property, Owner hereby releases and shall indemnify, protect, defend and hold harmless Land Trust, its officers, directors, members, employees, contractors, legal representatives, agents, successors and assigns from and against all liabilities, costs, losses, orders, liens, penalties, claims, demands, damages, expenses, or causes of action or cases, liability, damage or expense suffered or incurred by or threatened against Owner or any other person or entity, to the Property or the Easement. Owner shall be solely liable for injury or the death of any person, or physical damage to any property, or any other costs or liabilities resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause, unless due to the negligence or willful misconduct of Land Trust. Owner agrees to take out, and keep in force, public liability and other insurance to protect Owner against any liability to the public, whether to persons or property, incident to the use of or resulting from an occurrence in or about the Property. Such insurance shall be in the amount maintained by comparable properties for comparable uses and in no case less than One Million Dollars ($1,000,000) per occurrence, or such greater amount as Land Trust may require commensurate with inflation. Land Trust shall be named additional insured on Owner's general liability insurance policy.

Commentary. Some insurers will not allow additional named insureds.

(8) Indemnification by Land Trust. Land Trust shall indemnify, defend with counsel of Owner's choice, and hold Owner harmless from, all expense, loss, liability, damages and claims, including Owner's attorney fees, if necessary, arising out of Land Trust's entry on the Property, unless caused by a violation of this Easement by Owner or by Owner's negligence or willful misconduct.

Commentary. Some land trusts omit this provision unless the donor requests it.

AND?
Land Trust agrees to take out, and keep in force, general liability insurance to protect Land Trust against any liability, whether to persons or property, incident to its right to

enter upon the Property to monitor compliance with and otherwise enforce this Easement. Such insurance shall be in the amount maintained for comparable monitoring purposes, in no event shall be less than One Million Dollars ($1,000,000) per occurrence, and shall name Owner as an additional insured. Upon request of Owner, Land Trust shall provide a copy of the insurance policy evidencing such coverage. Land Trust shall indemnify, defend and hold Owner harmless from all liabilities, costs (including reasonable attorney fees and cost), damages, claims and losses arising out of any damage to property or injury or death of any person occurring in, on, above or about the Property resulting from any act or omission of Land Trust and its members, officers, trustees, employees, agents and contractors, unless due solely to the negligence of Owner, its partners, officers, trustees, employees, agents, and contractors, and the heirs, personal representatives, successors and assigns of Owner.

Commentary. Most land trusts omit this provision unless a donor demands a reciprocal insurance provision. This sort of provision presents increasing problems when there are multiple owners.

9. Representations and Warranties. Owner agrees and Granting Owner represents and warrants that, after reasonable investigation and to the best of their knowledge:

(1) No Hazardous Materials Liability. [Other than agricultural and/or household chemicals that have been applied, used, and disposed of in accordance with all then-applicable laws, n] [N]o substance defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation, or requirement including, without limitation, The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("**CERCLA**") (the "**Environmental Compliance Laws**") as hazardous, toxic, polluting, or otherwise contaminating to the air, water, or soil, or in any other way harmful or threatening to human health or the environment, exists on or has been released, generated, treated, stored, used, disposed of, deposited, abandoned, or transported in, on, under, from, or across the Property. Owner represents, warrants and covenants to Land Trust that Owner's activities upon and use of the Property are in compliance with all Environmental Compliance Laws. Without limiting the obligations of Owner under this Easement, Owner agrees to indemnify, protect and hold Land Trust harmless against any and all claims arising from or connected with any hazardous materials present, alleged to be present, or otherwise associated with the Property at any time, except any hazardous materials placed, disposed or released by Land Trust, its employees or agents. If any action or proceeding is brought against Land Trust by reason of any such claim, Owner shall, at the election of and upon written notice from Land Trust, defend such action or proceeding by counsel reasonably acceptable to Land Trust or reimburse Land Trust for all charges it incurs for legal services in defending the action or proceeding. If, at any time, there occurs, or has occurred, a release in, on, from, under, or about the Property of any substance now or hereafter defined, listed, or otherwise classified pursuant to any

Environmental Compliance Laws as hazardous, toxic, polluting, or otherwise contaminating to the air, water, or soil, or in any other way harmful or threatening to human health or the environment, Owner shall perform containment, remediation, and any cleanup actions which such Environmental Compliance Laws require Owner to perform.

> **Commentary.** Note that Land Trust has an independent obligation to investigate and do environmental due diligence for hazardous materials. Land Trust *Standards and Practices* 9C.

OR

(1)(a) No Hazardous Materials Liability. Owner agrees and Granting Owner represents and warrants that they have no actual knowledge of a release or threatened release of any Hazardous Materials on, at, beneath or from the Property. Owner hereby promises to defend and indemnify Land Trust against all litigation, claims, demands, penalties and damages, including reasonable attorney fees, arising from or connected with the release or threatened release of any Hazardous Materials on, at, beneath or from the Property, or arising from or connected with a violation of any Environmental Laws. Owner's indemnification obligation shall not be affected by any authorizations provided by Land Trust to the Owner with respect to the Property or any restoration activities carried out by Land Trust at the Property[; provided, however, that Land Trust shall be responsible for any Hazardous Materials contributed after this date to the Property by Land Trust].

(b) Owner agrees to remain in compliance with, all applicable Environmental Laws. Owner agrees and Granting Owner represents and warrants that there are no notices by any governmental authority of any violation or alleged violation of, non-compliance or alleged noncompliance with or any liability under any Environmental Law relating to the operations or conditions of the Property.

(c) "**Environmental Law**" or "**Environmental Laws**" means any and all federal, state, local or municipal laws, rules, orders, regulations, statutes, ordinances, codes, guidelines, policies or requirements of any governmental authority regulating or imposing standards of liability or standards of conduct (including common law) concerning air, water, solid waste, Hazardous Materials, worker and community right-to-know, hazard communication, noise, radioactive material, resource protection, subdivision, inland wetlands and watercourses, health protection and similar environmental health, safety, building and land use as may now or at any time hereafter be in effect.

(d) "Hazardous Materials" means any petroleum, petroleum products, fuel oil, waste oils, explosives, reactive materials, ignitable materials, corrosive materials, hazardous chemicals, hazardous wastes, hazardous substances, extremely hazardous substances, toxic substances, toxic chemicals, radioactive materials, infectious materials and any other element, compound, mixture, solution or substance which may pose a present or potential hazard to human health or the environment or any other material

defined and regulated by Environmental Laws.

(e) If at any time after the effective date of this Easement there occurs a release, discharge or other incident in, on, or about the Property of any substance now or hereafter defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation, or requirement as hazardous, toxic, polluting, or otherwise contaminating to the air, water, or soil, or in any way harmful or threatening to human health or the environment, Owner agrees to take any steps that are required of the Owner with respect thereto under federal, state, or local law necessary to ensure its containment and remediation, including any cleanup.

Commentary. Consider adding a requirement for notice to Land Trust.

(2) Limited Status of Land Trust. Despite any arguably contrary provision in this Easement, the Parties do not intend this Easement to be, and this Easement shall not be, construed such that it creates in or gives to Land Trust any of the following:

(a) The obligations or liabilities of an "owner" or "operator," as those terms are defined and used in Environmental Compliance Laws;

(b) The obligations or liabilities of a person described in 42 U.S.C. section 9607(a)(3) or (4);

(c) The obligations of a responsible person under any applicable Environmental Laws;

(d) Any right to investigate, control, monitor or remediate any Hazardous Materials associated with the Property;

(e) Any right to exercise physical or management control over the day-to-day operations of the Property or any of Owner's activities on the Property;

(f) Any authority to specify the chemicals or Hazardous Substances that may be used on the Property, or

(g) Any control over Owner's ability to investigate, remove, remediate or otherwise clean up any Hazardous Materials associated with the Property.

Nothing in this Easement shall be construed as giving rise, in the absence of judicial decree, to any right or ability in Land Trust to exercise physical or managerial control over the day-to-day operations of the Property, or any of Owner's activities on the Property, or otherwise to become an operator with respect to the Property within the meaning of the Environmental Compliance Laws. The term "hazardous materials" includes, without limitation, (a) material that is flammable, explosive or radioactive; (b) petroleum products, including by-products and fractions thereof; and (c) hazardous materials, hazardous wastes, hazardous or toxic substances, or related materials defined in CERCLA, the Hazardous Materials Transportation Act (49 U.S.C. section 6901 et seq.); the Hazardous Waste Control Law (California Health & Safety Code section 25100 et seq.); the Hazardous Substance Account Act (California Health & Safety Code section

25300 et seq.), and in the regulations adopted and publications promulgated pursuant to them, or any other applicable federal, state or local laws, ordinances, rules, regulations or orders now in effect or enacted after the date of this Easement.

(3) Storage Tanks. There are not now any underground storage tanks located on the Property, whether presently in service or closed, abandoned, or decommissioned, and no underground storage tanks have been removed from the Property in a manner not in compliance with applicable Environmental Compliance Laws.

(4) Compliance with Law. Granting Owner and the Property are in compliance with all federal, state, and local laws, regulations, and requirements applicable to the Property and its use.

(5) Litigation, Proceedings and Investigations. There is no pending or threatened litigation in any way affecting, involving, or relating to the Property. No civil or criminal proceedings or investigations have been instigated at any time known to Granting Owner, none is now pending, and no notices, claims, demands, or orders have been received, arising out of any violation or alleged violation of, or failure to comply with, any federal, state, or local law, regulation, or requirement applicable to the Property or its use, nor do there exist any facts or circumstances that the Granting Owner might reasonably expect to form the basis for any such proceedings, investigations, notices, claims, demands, or orders.

Commentary. Optional addition in some factual circumstances: Granting Owner has made full written disclosure to Land Trust of a past incident on the Property that might have but did not give rise to an investigation.

(6) Acts Beyond Owner's Control. Nothing contained in this Easement shall be construed to entitle Land Trust to bring any action against Owner for any injury to or change in the Property resulting from causes beyond Owner's control, including, without limitation, fire, flood, storm, and natural earth movement, or other natural events, or from any prudent action taken by Owner under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes.

Commentary. Consider whether to omit unless the donor asks for this provision.

(7) Granting Owner's Title Warranty. Granting Owner owns the entire fee simple interest in the Property, including the entire mineral estate, free from all encumbrances except those described in Exhibit __, and hereby promises to defend the same against all claims that may be made against the Easement.

OR

(7) Granting Owner's Title Warranty. Granting Owner represents and warrants that Granting Owner owns the entire fee simple interest in the Property, including the entire mineral estate, and hereby promises to defend this Easement against all claims that may be made against it. Any and all financial liens or financial

encumbrances existing as of the date of the execution of this Easement have been subordinated. Exhibit __ (Prior Encumbrances) sets forth all the non-financial encumbrances.

OR

(7) Granting Owner's Title Warranty. Granting Owner owns the entire fee simple interest in the Property, including the entire mineral estate, free from all encumbrances except those described in Exhibit__, attached hereto and incorporated herein by this reference. Granting Owner agrees to take all steps necessary to cause the title insurance company to defend the Property against all claims that may be made against title that are covered by Granting Owner's title insurance policy. Except as may be reflected in Exhibit __, Granting Owner warrants that no change affecting title has occurred since Granting Owner acquired the Property.

> **Commentary.** This last paragraph is a much less desirable option for Land Trust. Land Trust may protect itself by obtaining its own title insurance. Land Trust is required to perform its own title investigation under Standards and Practices.

(8) Subordination. Any and all financial liens or financial encumbrances existing as of the date of the execution of this Easement have been subordinated, as indicated in Exhibit __. Any financing lien or encumbrance at any time shall be subordinate to this Easement, and the Parties agree to execute such documents as may be reasonably required by Owner's lender(s) to accomplish such subordination.

(9) No Representation of Tax Benefits. Owner represents and warrants that (i) Owner has not relied upon any information or analyses furnished by Land Trust with respect to the availability, amount or effect of any tax deduction, credit or other benefit to Owner or to the value of this Easement or the Property; (ii) Owner has relied solely upon personal judgment and/or professional advice furnished by the appraiser and legal, financial and accounting professionals engaged by Owner. [If any person providing services in connection with this Easement or the Property was recommended by Land Trust, Owner acknowledges that Land Trust is not responsible in any way for the performance of services by these persons; and (iii) donation of this Easement is not conditioned upon the availability or amount of any deduction, credit or other tax benefit.]

> **Commentary.** A land trust may cover these points adequately in other communications so that inclusion of this paragraph may be unnecessary.

(10) Consideration. Granting Owner acknowledges receipt of $1.00 in consideration of the grant of this Easement to Land Trust. The consideration has been paid in full to Granting Owner.

> **Commentary.** A few States may require payment of consideration. If unnecessary, omit.

10. Condemnation and Extinguishment. This Easement may be terminated only due to extraordinary circumstances and only by way of condemnation, as

described below, or judicial extinguishment if a court with jurisdiction, at the joint request of Owner and Land Trust, determines that conditions on or surrounding the Property have changed to such a degree that it has become impossible or impractical to fulfill the Conservation Purpose[s]. If all or any part of the Property is taken by exercise of the power of eminent domain or acquired by purchase in lieu of condemnation by any public, corporate, or other entity with eminent domain powers or authority, so as to terminate this Easement in whole or in part, Owner and Land Trust shall act jointly to recover the full value of the interests in the Property subject to the taking or in-lieu purchase and all direct and incidental damages resulting therefrom. All expenses reasonably incurred by Owner and Land Trust in connection with the taking or in-lieu purchase shall be paid out of the amount recovered. Land Trust's share of the balance of the amount recovered shall be determined by multiplying that balance by the ratio set forth immediately below. If this Easement is taken, in whole or in part, by exercise of the power of eminent domain, Land Trust shall be entitled to compensation in accordance with applicable law.

Commentary. See Land Trust *Standards and Practices* 11J.

(1) Valuation. This Easement constitutes a real property interest immediately vested in Land Trust that, for purposes of condemnation, the Parties stipulate to have a fair market value determined by multiplying (1) the fair market value of the Property unencumbered by the Easement (minus any increase in value after the date of this grant attributable to improvements) by (2) the ratio of the value of the Easement at the time of this grant to the fair market value of the Property, without deduction for the value of the Easement, at the time of this grant. The values at the time of this grant shall be those values used to calculate the deduction for federal income tax purposes allowable by reason of this grant, pursuant to section 170(h) of the Internal Revenue Code of 1986, as amended. For the purposes of this subparagraph, the ratio of the value of the Easement to the value of the Property unencumbered by the Easement shall remain constant.

Commentary. Consider whether Land Trust should share in the appreciation of the value of the land proportionately. Alternate language might read: "If this Easement is terminated in whole or in part, whether by judicial extinguishment or condemnation, Land Trust shall be entitled to a percentage of the gross sale proceeds or condemnation award equal to the greater of (i) the percentage required pursuant to Treasury Regulation §1.170A-14(g)(6); or (ii) the proportion that the value of this Easement at the time of extinguishment or condemnation bears to the then value of the Property as a whole."

(2) Application of Proceeds. Land Trust shall use all proceeds received under the circumstances described in this paragraph to pay the costs to monitor, enforce and preserve any portions of the Property that remain subject to this Easement, or, if no remaining portion of the Property is subject to this Easement, to monitor and enforce other easements held by Land Trust that are comparable to this Easement and to conserve properties subject to such other easements in a manner consistent with Land Trust's conservation purposes under this Easement.

(3) Highest and Best Use. The purposes of this Easement are presumed to be the best and most necessary public use as defined in section _____ of _____[state law]_____.

(4) Extinguishment. If circumstances arise in the future that render the purpose of this Easement impossible or impractical to accomplish, this Easement can only be terminated or extinguished by judicial proceedings in a court of competent jurisdiction. The amount of the proceeds to which Land Trust shall be entitled, after the satisfaction of prior claims, from any sale, exchange, or involuntary conversion of all or any portion of the Property subsequent to termination or extinguishment, shall be the stipulated fair market value of this Easement or proportionate part thereof, as determined in accordance with Paragraph 10.1.

Commentary. See Land Trust *Standards and Practices* 11K.

11. Transfers and Amendments.

(1) Transfer of Easement by Land Trust. This Easement may only be assigned or transferred to a private nonprofit organization that, at the time of transfer, is a "qualified organization" under section 170(h) of the Internal Revenue Code, authorized to acquire and hold easements pursuant to section _____ of _____[state law]_____, that has similar purposes to preserve agricultural lands and open space. If no such private nonprofit organization exists or is willing to assume the responsibilities imposed by this Easement, then this Easement may be transferred to any public agency authorized to hold interests in real property as provided in section _____ of _____[state law]_____. Such an assignment or transfer may proceed only if the organization or agency expressly agrees to assume the responsibility imposed on Land Trust by this Easement and is expressly willing and able to hold this Easement for the purpose for which it was created. All transfers shall be duly recorded. If Land Trust is no longer authorized to hold easements under section _____ of _____[state law]_____ (or any successor provision then applicable), it shall transfer or assign its rights and obligations under this Easement in accordance with this paragraph. All consideration received by Land Trust for any transfer or assignment shall be applied first to the costs incurred by Land Trust for such transfer or assignment and to monitor and enforce this Easement during its ownership thereof, and any remaining consideration shall be used by Land Trust for its costs of monitoring and enforcing comparable easements upon other properties and for conservation of those other properties in a manner consistent with Land Trust's conservation purposes under this Easement.

(2) Subsequent Transfers by Owner. Owner agrees to disclose this Easement to all prospective buyers of the Property and to inform Land Trust of a prospective sale. Owner agrees that this Easement shall be incorporated by reference in any deed or other legal instrument by which Owner transfers any interest in all or a portion of the Property or by which Owner grants to a third party a right or privilege to use the Property, including, without limitation, any easement, leasehold interest, or license

agreement. Owner further agrees to give written notice to Land Trust of the transfer of any such interest, or the grant of any such right or privilege, at least ___ days prior to the date of such transfer or grant. The failure of Owner to perform any act required by this paragraph shall not impair the validity of this Easement or limit its enforceability in any way. If Property subject to this Easement is transferred while a violation remains uncured, Owner who transfers remains liable for the violation jointly and severally with Owner to whom the Property is transferred.

OR

(2) Subsequent Transfers by Owner. Any time the Property itself, or any interest in it, is transferred by Owner to any third party, Owner shall notify Land Trust in writing at least ___ days prior to the transfer of the Property or interest, and the document of conveyance shall expressly incorporate by reference this Easement. Any document conveying a lease of the Property shall expressly incorporate by reference this Easement. Failure of Owner to do so shall not impair the validity of this Easement or limit its enforceability in any way.

OR

(2) Subsequent Transfers by Owner and Transfer Fee. Any time the Property itself, or any interest in it, is transferred by Owner to any third party, Owner shall notify Land Trust in writing at least ___ days prior to the transfer of the Property or interest, and the document of conveyance shall expressly incorporate by reference this Easement. Any document conveying a lease of the Property shall expressly incorporate by reference this Easement. Failure of Owner to do so shall not impair the validity of this Easement or limit its enforceability in any way. At the time of any transfer of a fee interest [or lease in excess of __ years], Owner shall pay to Land Trust a transfer fee of $_____ [or __ percent of the sale price/fair market value]. For purposes of this transfer fee, any testamentary conveyance or conveyance by gift by Owner to a member of Owner's family [within the third degree of consanguinity] shall not be considered a transfer.

(3) Estoppel Certificates. Upon receipt of a written request by Owner, Land Trust shall, within ___ days thereafter, execute and deliver to Owner, or any person designated by Owner, any document, including an estoppel certificate, that certifies, to the best of Land Trust's knowledge, Owner's compliance with any obligation of Owner contained in this Easement and otherwise evidences the status of this Easement. Such certification shall be limited to the condition of the Property as of Land Trust's most recent inspection. If Owner requests more current documentation, Land Trust shall conduct an inspection, at Owner's expense, within ___ days of receipt of Owner's written request therefor. Prior to any transfer of title, Owner shall request such certification.

OR

(3) Estoppel Certificates. Land Trust will provide certificates to Owner or third parties indicating the extent to which, to Land Trust's knowledge after due

inquiry, the Property is in compliance with this Easement, after an inspection by Land Trust made at Owner's cost within ___ days after Owner's written request.

Commentary. *Another option is to omit all estoppel certificate provisions unless the Grantor requests them.*

(4) Additional Easements. Owner shall not grant any additional easements, rights of way or other interests in the Property (other than a security interest that is subordinate to this Easement), or grant or otherwise abandon or relinquish any water right or mineral right or agreement relating to the Property, without first obtaining the written consent of Land Trust. Land Trust may withhold such consent if it determines that the proposed interest or transfer is inconsistent with the purposes of this Easement or will impair or interfere with Conservation Values. This provision shall not prohibit transfer of a fee or leasehold interest in the Property that is subject to this Easement and complies with its provisions.

OR

(4) Additional Easements. The grant of any subsequent easements, interests in land, or use restrictions that might diminish or impair the agricultural productive capacity or open space character of the Property is prohibited. Owner may grant subsequent easements, including conservation easements, interests in land, or use restrictions on the Property, provided that they do not restrict agricultural practices conducted or maintained for commercial purposes in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations in the same locality, or interfere with any term of this Easement, as determined by Land Trust. Land Trust's written approval shall be obtained at least ___ days in advance of Owner's execution of any proposed subsequent easement, interests in land, or use restriction on the Property, and such subsequent easements, interests in land, and use restrictions shall make reference to and be subordinate to this Easement. Land Trust shall deny any proposed subsequent easement, interest in land, or use restriction that appears to restrict agricultural husbandry practices, or diminishes or impairs the agricultural productive capacity or open space character of the Property.

(5) Permitted Amendment. If circumstances arise under which an amendment to or modification of this Easement would be appropriate, Owner and Land Trust may jointly amend this Easement; provided, however, that (i) no amendment or modification shall be allowed that will adversely affect the qualification of this Easement or the status of Land Trust under any applicable laws, including sections ____ et seq. of ___[state law]___ or section 170(h) of the Internal Revenue Code of 1986, as amended, and (ii) any amendment or modification shall not harm Conservation Values, shall be consistent with the purposes of this Easement, and shall not affect its perpetual duration. Any amendment or modification shall be recorded in the Official Records of _____ County, _____. This Easement is not otherwise subject to amendment or modification of any sort. No amendment shall diminish or affect the perpetual duration or the Purpose of this Easement, nor the status or rights of

Land Trust under this Easement.

> **Commentary.** See Land Trust *Standards and Practices* 11I; Amending Conservation Easements: Evolving Practices and Legal Principles (Land Trust Alliance 2007). Consider adding any specific express provisions, for example, that no amendment "can permit additional residences on the Property beyond the number of residences permitted on the effective date"—if that is true and important, or that no amendment can permit whatever other absolute prohibition might be appropriate. Not only does this addition further achievement of donor intent but it also reinforces the perpetual nature of the restrictions for the IRS. Additional policies are available at http://learningcenter.lta.org/objects/view.acs?object_id=15164.

OR

(5) Amendments. It is the Parties' expectation that this Easement will not be amended or modified. Upon request by the Granting Owner/Owner, Land Trust may in its sole discretion agree to amend or modify this Easement, but in no event shall such amendment be made without compliance with both Land Trust's internal procedures and standards for such modification and state and local laws regarding the creation and amendment of easements and in conformity with federal laws (including tax laws) associated with easement creation. No amendment shall be allowed that would adversely affect the qualifications of this Easement as a charitable gift or the status of Land Trust under any applicable laws, including section 170(h) of the Internal Revenue Code or the laws of the State of _____, serves to weaken the Easement in terms of protection of the Conservation Values or affects its perpetual duration. Any such amendment shall be recorded in the official records of the county in which the Property is located.

AND

Any party requesting an amendment shall pay all Land Trust costs including staff time and direct costs for reviewing the request, whether the amendment is granted or denied, and for negotiating and completing the amendment, if approved.

OR

(5) Permitted Amendment Agreed to by Original Granting Owner Only. If circumstances arise under which an amendment to or modification of this Easement would be appropriate, the original Granting Owner and Land Trust may jointly amend this Easement; provided, however, that (i) no amendment or modification shall be allowed that will adversely affect the qualification of this Easement or the status of Land Trust under any applicable laws, including sections _____ et seq. of ___[state law]___ or section 170(h) of the Internal Revenue Code of 1986, as amended, (ii) any amendment or modification shall not harm Conservation Values, shall be consistent with the purposes of this Easement, and shall not affect its perpetual duration, (iii) the original Granting Owner must consent to the amendment if sought by a subsequent Owner, whether or not that original Granting Owner continues to own the Property, and (iv) no amendment is permitted once the original Granting Owner is deceased. Any amendment or modification shall be recorded in the Official Records of _____

County, _____. This Easement is not otherwise subject to amendment or modification of any sort. No amendment shall diminish or affect the perpetual duration or the Purpose of this Easement, nor the status or rights of Land Trust under this Easement.

OR

(5) No Amendment Permitted. No amendment or modification of this Easement shall be allowed under any circumstance absent order of a court of competent jurisdiction.

12. Perpetuation of Easement. This Easement shall be of perpetual duration, it being the express intent of the Parties that this Easement not be extinguished by, or merged into, any other interest or estate in the Property now or hereafter held by Land Trust or any other Party.

OR

12. Perpetual Duration. Pursuant to ____[state/federal law]_____, this Easement shall run with the land in perpetuity. Every provision of this Easement that applies to Owner or Land Trust shall also apply to their respective agents, heirs, executors, administrators, assigns, and all other successors as their interests may appear.

> **Commentary.** The second sentence is also covered in the "Successors" paragraph below.

OR

12. Perpetual Duration—No Merger. No merger of title, estate or interest shall be deemed effected by any previous, contemporaneous, or subsequent deed, grant, or assignment of an interest or estate in the Property, or any portion thereof, to Land Trust, or its successors or assigns. It is the express intent of the Parties that this Easement not be extinguished by, merged into, modified, or otherwise deemed affected by any other interest or estate in the Property now or hereafter held by Land Trust or its successors or assigns.

> **Commentary.** Consider whether there is any likelihood that Land Trust will ever own this property in fee. If so, is it appropriate to maintain the restrictions or should the easement merge? State laws vary as to the circumstances in which merger will occur, whether contracting parties can prevent merger by a provision such as this, and related subjects.

OR

12. Perpetual Duration—No Merger. Granting Owner and Land Trust explicitly agree that it is their express intent, forming a part of the consideration of this Easement, that the provisions of this Easement are to last in perpetuity. To accomplish that intent and in view of the public interest in its enforcement of this Easement, the Parties specifically agree that (1) no purchase or transfer of the underlying fee interest in the Property by or to Land Trust shall be deemed to eliminate this Easement, or any portion thereof, under the doctrine of "merger" or other legal doctrine; and (2) should

Land Trust come to own all or a portion of the fee interest in the Property, Land Trust as successor in title to Owner shall observe and be bound by all obligations of the Owner under and all restrictions imposed upon the Property by this Easement.

The Parties further agree that, if it becomes necessary to avoid the application of the doctrine of "merger" or similar legal doctrine that would result in extinguishment of this Easement, Land Trust, as promptly as practicable, shall either (1) transfer its fee simple interest in the Property subject to this Easement, or (2) assign Land Trust's interests in this Easement of record to another holder in conformity with the requirements of this paragraph. Any instrument of assignment of this Easement or the rights conveyed herein shall refer to the provisions of this paragraph and shall contain language necessary to continue it in force.

OR

12. No Merger. Unless the Parties expressly state that they intend a merger of estates or interests to occur, then no merger shall be deemed to have occurred hereunder or under any document executed in the future affecting this Easement.

13. Notices. Any notice, demand, request, consent, approval, or communication that a Party desires or is required to give to the other Parties shall be in writing and either served personally or sent by first class mail, postage prepaid, return receipt requested, or delivered by a nationally recognized overnight delivery service such as Federal Express or United Parcel Service, charges prepaid or charged to the sender's account. Addresses for purpose of giving notice are as follows:

To the Granting Owner:	To Land Trust:
_____	Executive Director
_____	_____ Land Trust
_____	_____
_____	_____

or to such other address as a Party from time to time shall designate by written notice to the other Parties. When personally delivered, notice is effective upon delivery. When mailed, certified mail, postage prepaid, return receipt requested, notice is effective on receipt, if delivery is confirmed by a return receipt. When delivered by an overnight delivery service, notice is effective on delivery, if delivery is confirmed by the delivery service. A recipient cannot defeat delivery by refusing to accept the notice, and notice is deemed delivered if refused.

14. Recordation. Land Trust shall record this instrument in timely fashion in the Official Records of _____ County, _____, and may re-record it at any time appropriate in Land Trust's discretion as may be required to preserve Land Trust's rights in this Easement.

OR

14. Recordation and Effective Date. Owner and Land Trust intend that the restrictions arising hereunder take effect on the day and year this Deed of Conservation Easement is recorded in the Official Records of _____ County, _____, after all required signatures have been affixed hereto. This Easement shall be timely recorded. Land Trust may re-record this instrument or record any other instrument at any time as may be required to preserve its rights in this Easement.

15. General Provisions.

(1) Controlling Law. The interpretation and performance of this Easement shall be governed by the laws of the State of California. [Unless otherwise stated, r] [R]eferences to authorities in this Easement shall be to the statute, rule, regulation, ordinance, or other legal provision that is in effect at the time this Easement becomes effective[, disregarding the conflicts of law principles of that State].

Commentary. In some States, a nearby neighbor can also sue. Add the final words if Grantor lives outside the State or has strong connections to another State.

(2) Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to achieve the conservation purposes of this Easement and the policy and purpose of section ____ et seq. of ___[state law]____. If any provision in this instrument is found to be ambiguous, an interpretation consistent with the conservation purposes of this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid. This Easement has been fully negotiated between the Parties so that the rule that documents may be construed against the drafter does not apply.

(2) Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to effect the purpose of this Easement and the policy and purpose of ___[state law conservation easement organic act/state and federal law governing easements]___.

(a) Construction Favoring Validity—If any provision in this instrument is found to be ambiguous, an interpretation consistent with this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid. The Parties acknowledge that each Party and its counsel have reviewed and revised this easement and that no rule of construction that ambiguities are to be resolved against drafting party shall be employed in the interpretation of this Easement.

(b) Conflict in Conservation Values—If a conflict arises between protection of one or more of the identified Conservation Values that may have an actual impact, or may have a potential impact, on one or more of the other identified Conservation Values, Land Trust intends to enforce this Easement, in its sole discretion, by giving the greatest level of protection to the Conservation Values in the hierarchy and order as listed in the Recitals, Paragraph __. Land Trust reserves the right to review this hierarchy of Conservation Values from time to time as the public benefits that are

provided by this Easement may change over time. Owner acknowledges that Land Trust has the right in its discretion and after consultation with Owner [and Granting Owner if alive and no longer owner of the Property], to modify and to revise this hierarchy by filing a Notice in the public records of _____ County, __[State]__. [Land Trust and Owner may mutually agree to modify and to revise this hierarchy by filing a Notice in the public records of _____ County, __[State]__.] The hierarchy set forth in Paragraph __ is intended to apply only to resolve actual or potential conflicts between protected Conservation Values, and therefore, this Paragraph __ may not be interpreted or construed by Owner, Land Trust, or any other person to justify a disregard of, or to discount, Land Trust's and Owner's obligations hereunder to protect and preserve all Conservation Values if such actual or potential conflict between protected Conservation Values does not exist.

> **Commentary.** One option is offered if Land Trust has the unilateral right to revise hierarchy of Conservation Values. An alternative in brackets is offered if Land Trust and Owner must mutually approve of revision of hierarchy of conservation values. A Granting Owner may want to retain the right to participate in the consultation or decision, so that option is also available. This provision requires a detailed recital that precisely identifies the "Conservation Values" and the initial hierarchy.

OR

(1/2) Controlling Law and Liberal Construction. This Easement shall be interpreted under the laws of the State of _____, resolving any ambiguities and questions of the validity of specific provisions so as to give maximum effect to its conservation purposes. [Any decisions resolving such ambiguities shall be documented in writing.]

(3) Significance of Recitals and Terms. The Recitals to this Easement are integral and operative provisions of this Easement. In all matters of interpretation, whenever necessary to give effect to any clause of this Easement, the neuter or gender-specific pronouns include the masculine and feminine, the singular includes the plural, and the plural includes the singular.

(4) Severability. If any provision of this Easement, or the application thereof to any person or circumstance, is found to be invalid, the remainder of the provisions of this Easement, or the application of such provision to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby. To the extent permitted by law, the Parties waive any provision of law that renders any provision of this Easement invalid, illegal or unenforceable in any respect.

OR

(4) Severability. If any term, provision, covenant, condition, or restriction of this Easement is held by a court of competent jurisdiction to be unlawful, invalid, void, unenforceable, or not effective the remainder of the agreement shall remain in full force and effect and shall in no way be affected, impaired, or invalidated.

(5) Entire Agreement. This Easement sets forth the entire agreement of the

Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous discussions, negotiations, understandings, or agreements of the Parties relating to the subject matter of this Easement, all of which are merged herein.

OR

(5) Entire Agreement. This Easement is the final and complete expression of the agreement between the Parties with respect to this subject matter. Any and all prior or contemporaneous agreements with respect to this subject matter, written or oral, are merged into and superseded by this written instrument.

(6) No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of Owner's title in any respect.

(7) Joint Obligation. The obligations imposed by this Easement upon multiple concurrent Owners shall be joint and several.

(8) Successors and Assigns. All covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of, the Parties hereto and their respective personal representatives, heirs, lessees, successors, and assigns and shall continue as a restrictive covenant and equitable servitude running in perpetuity with the Property. The terms "Owner" and "Land Trust," wherever used herein, and any pronouns used in place thereof, shall include, respectively, the Granting Owner and all of the Granting Owner's heirs, successors and assigns, and the above-named Land Trust and its successors and assigns.

(9) Termination of Rights and Obligations and Standing to Enforce. A Party's rights and obligations under this Easement terminate upon transfer of the Party's interest in the Easement or transfer of the Property, except all representations and warrantees made by and liabilities incurred by Granting Owner shall survive. Only Land Trust and Owner [and Granting Owner and/or the state Attorney General] may bring an action to enforce this Easement, and nothing herein shall be construed to grant any other individual or entity standing to bring an action to enforce this Easement if standing is not otherwise authorized under applicable law, nor to grant any rights in the Property by adverse possession or otherwise.

> **Commentary.** In some States, a nearby neighbor can also sue. If Granting Owner retains the right to approve amendment of the Easement, that needs to be added. Many donors are concerned that an easement will enable neighbors or strangers to sue, and the second sentence is intended to assure such owners that the Easement does not create rights to sue that do not otherwise exist.

(10) No Oral Approval. [Owner understands that any] Any oral approval or oral representation made by a Land Trust officer, employee or agent does not meet the requirements of this Easement, does not otherwise bind or commit Land Trust, and may not be relied on by Owner. [Owner agrees that n] No oral approval or oral representation made by Land Trust's officers, employees or agents, or understood by Owner to have been made by Land Trust, its officers, employees or agents, shall be used

by Owner to assert that Land Trust is, in any way, estopped or has made an election or has waived any provision of this Easement.

(11) Reasonableness Standard. Owner and Land Trust shall follow a reasonableness standard, shall use their best efforts to make any determinations that are necessary or are contemplated to be made by them (either separately or jointly) under this Easement in a timely manner, shall cooperate with one another, and shall take all other reasonable action suitable to these ends.

(11) Mediation. If a dispute arises between Owner and Land Trust concerning the consistency of any proposed use or activity with this Easement, and Owner agrees not to proceed with the use or activity pending resolution of the dispute, either Party may propose mediation by written request delivered to the other. If both Parties agree, then, within ___ days after receipt of the request, the Parties shall select a single impartial mediator. If the Parties are unable to agree on selection of a single mediator, then the Parties shall, within ___ days of receipt of the initial request, jointly apply to the ____[arbitration body]_____ or to a court for appointment of an impartial mediator with relevant experience in real estate and conservation easements. Mediation shall then proceed in accordance with the following guidelines:

> **Commentary.** Consider whether to set a time for the mediation request to be made. Consider whether to provide that mediation does not affect the land trust's right to interim injunctive relief. State law may be clear on that issue, so the easement should not muddy the water. These mediation provisions appear in the general provisions, reflecting that they are possible remedies available to both Land Trust and Owner. The earlier databank section on remedies is specific to remedies available to Land Trust. Think about whether to broaden the scope of the remedies section to include mediation there as an alternative to including it here.

(a) Purpose—The purpose of the mediation is to (i) promote discussion between the Parties; (ii) assist the Parties to develop and exchange pertinent information concerning issues in the dispute; and (iii) assist the Parties to develop proposals that will enable them to arrive at a mutually acceptable resolution of the controversy. The mediation is not intended to result in any express or de facto modification or amendment of this Easement.

> **Commentary.** This mediation provision is applicable to disputes between Owner and Land Trust concerning the consistency of any proposed use or activity with the Easement. Consider whether to expand or contract the application of the mediation remedy, but the decision can also be made when the dispute arises. No purpose is served by having the ability to force an adversary into mediation, and the parties can always agree to mediate even if the Easement is silent.

(b) Participation—The mediator may meet with the Parties and their counsel jointly or ex parte. The Parties agree that they will participate in the mediation process in good faith and expeditiously, attending all sessions scheduled by the mediator. Party representatives with settlement authority will attend mediation sessions as requested by the mediator.

(c) Confidentiality – All information presented to the mediator shall be deemed confidential and shall be disclosed by the mediator only with the consent of the Parties or their respective counsel. The mediator shall not be subject to subpoena by any Party. No statements made in or documents prepared for mediation sessions shall be disclosed in any subsequent proceeding or construed as an admission of a Party. The sole exception from this prohibition shall be the settlement agreement or similar document to which the Parties agree in the context of the mediation.

(d) Time Period – Neither Party shall be obligated to continue the mediation beyond ___ days from the date of selection or appointment of a mediator nor if the mediator finds no reasonable likelihood that continuing mediation will result in mutually agreeable resolution of the dispute.

(e) Costs – Unless otherwise agreed at the time, the cost of the mediator shall be borne equally by Owner and Land Trust; the Parties shall bear their own expenses, including attorney fees, individually.

Commentary. A land trust may elect to omit either mediation or arbitration provisions or may opt for one but not the other. Mediation is rarely successful if the parties are adamant in their views and unwilling to consider compromise, so mandatory mediation may be a pointless expense. A strong mediator can sometimes move mountains, however, so it may be valuable to have the ability to require a mediation before litigation begins. Mediation may cost $5,000 to $8,000 a day just for the mediator. The local legal culture and availability of strong mediators, the nature of the easement, and many other factors will affect the decision. One further "baseball arbitration" provision might be included, borrowed from the Pennsylvania model http://www.conserveland.org/model_documents/Commentary08sep11.doc, with appropriate adaptation:

> If the mediation under the preceding subsection is unsuccessful, Owner and Land Trust agree to submit their respective final written proposals to a conservation or resource management professional, unaffiliated with either Owner or Land Trust, who has the expertise, training or qualifications to review their respective proposals (the "Reviewer") and to select one, and only one, that best meets the standard of reasonableness set forth above. If Owner and Land Trust are unable to identify a mutually agreeable Reviewer, the Reviewer is to be appointed by _____. Owner and Land Trust must each submit one, and only one, written proposal to the Reviewer within ten (10) days following appointment of the Reviewer. Within thirty (30) days following receipt of such proposals, the Reviewer must select, by notice to Owner and Land Trust, either Owner's proposal or Land Trust's proposal as submitted, without compromise or modification. Neither Owner nor Land Trust are permitted to communicate with the Reviewer during the Review period. The decision of the Reviewer is final and is conclusively deemed to meet the standards of reasonableness set forth above. Owner and Land Trust accept this procedure in full satisfaction of any and all rights that they may have under applicable law or otherwise to appeal or otherwise litigate disputes arising with respect to Review under this

Easement. Cost of the Reviewer are to be borne equally by Owner and Land Trust.

(12) Binding Arbitration. If a dispute arises between Owner and Land Trust concerning the consistency of any proposed use or activity with this Easement, either Party may refer the dispute to binding arbitration by a request made in writing upon the other, provided that Owner agrees not to proceed with the use or activity pending resolution of the dispute.

Commentary. The arbitration provisions appear in the general provisions, reflecting that they are possible remedies available to both Land Trust and Owner. The earlier databank section on remedies is specific to remedies available to Land Trust. Think about whether to broaden the scope of the remedies section to include arbitration there as an alternative to including it here. Also, consider whether to expand the arbitration provision to encompass all disputes or to narrow it.

(a) Timing and Selection of Arbitrator—Within ___ days of the receipt of the request, the Parties shall select a single arbitrator to hear the matter. If the Parties are unable to agree on selection of a single arbitrator, then each Party shall name one arbitrator and the two arbitrators thus selected shall select a third neutral arbitrator; provided, however, if either Party fails to select an arbitrator within ___ days after appointment of the first arbitrator, or if the two arbitrators fail to select a third arbitrator within ___ days after appointment of the second arbitrator, then a proper court, on petition of a Party, shall appoint the second or third arbitrator or both, as the case may be, in accordance with section _____ et seq. of _____state law_____, or any successor statute then in effect. Any arbitrator chosen shall be experienced in both real estate law and conservation easement law.

Commentary. Use of three arbitrators results in a very expensive process as the parties will be paying for all three plus at least one attorney on each side. Many States have laws under which the court will appoint a single arbitrator if the parties cannot agree, and that may be a more desirable default than a three-arbitrator panel.

(b) Law Governing and Entry of Judgment—The matter shall be settled in accordance with that statute or other body of rules then in effect, and a judgment of arbitration award may be entered in any court having jurisdiction thereof.

(c) Injunctive and Other Relief—The arbitrator shall have the same powers as a __[superior]_____ judge to order in the award all injunctive, declaratory or other relief or remedies that could be awarded in any action filed in _____ County Court upon the same causes of action, and the arbitrator may retain continuing jurisdiction when appropriate to make further determinations or to enforce the award.

Commentary. Ability to include this provision depends on state law.

(d) Costs—The prevailing Party shall be entitled, in addition to such other relief

as may be granted, to a reasonable sum as and for all its costs and expenses related to the arbitration, including, without limitation, fees and expenses of arbitrator(s) and attorney fees, as determined by the arbitrators and any court of competent jurisdiction that may be called upon to enforce or review the award.

_____ _____

Granting Owner's initials **Land Trust Representative's initials**

Commentary. Initials may be required under the laws of some States. In some States, the Easement can be drafted so that the Owner pays Land Trust fees and costs if Land Trust prevails but the parties each bear their own fees and costs if Owner prevails. Other States mandate reciprocal provisions if there is provision for shifting fees and costs.

(13) Captions. The captions in this instrument have been inserted solely for convenience of reference and shall have no effect upon construction or interpretation.

Commentary. Consider whether to omit this paragraph. Although it commonly appears, its value may be limited at best.

(14) Counterparts. The Parties may execute this instrument in two or more counterparts that shall, in the aggregate, be signed by all Parties; each counterpart shall be deemed an original instrument as against any Party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall control.

Commentary. Omit the paragraph if all signatures will be done at once or if an escrow is used and the parties will each sign the same document through the escrow.

(15) Representation of Authority of Signatories. Each individual executing this Easement on behalf of the Granting Owner or Land Trust represents and warrants to the other Party that the execution and delivery of this Easement and all related documents have been duly authorized by the Party for which the individual is signing and that the individual has the legal capacity to execute and deliver this Easement and thereby to bind the Party for which the individual is signing.

Commentary. Consider omitting the paragraph if Granting Owner is a natural person.

(16) Representation by Counsel. The Granting Owner retained and has been represented by _____ in the negotiation and preparation of this Easement. Land Trust has been represented by its staff attorney _____and assisted by pro bono counsel in this transaction.

Commentary. Omit the paragraph if Granting Owner was not represented by counsel and vary the second sentence as appropriate.

(17) Appraisal; Tax Forms. If Granting Owner claims a federal and/or state income or other tax deduction for the donation of this Easement, Granting Owner shall provide Land Trust with a copy of the "qualified appraisal" (as defined by the Treasury Regulations applicable to the valuation of donated property for federal income tax purposes) of the fair market value of the Property before this Easement was recorded,

the fair market value of the Property subject to the restrictions of this Easement, and the fair market value of the Easement. Within a reasonable time after Land Trust receives the qualified appraisal of the Easement and a properly and accurately completed IRS Form 8283 (or its successor form or state equivalent), Land Trust will complete and execute those portions of that form that require information from Land Trust as the donee and return it to Granting Owner. Land Trust will not knowingly sign a Form 8283 if it has significant concerns about the appraiser, appraisal and/or claimed tax deduction. Land Trust makes no assurance as to whether a deduction may be available or, if so, what the tax benefits may be.

> **Commentary.** See Land Trust *Standards and Practices* 10. Much or all of this information should be given to the donor much earlier in the process, preferably in written form, to ensure that the donor is informed of these and related important points. Guidance Document http://www.landtrustaccreditation.org/pdf/10A-10BGuidanceDocument.pdf. This paragraph should be used, if at all, as a secondary communication because it will be seen by the donor too late in the usual donation timeline to convey information needed earlier in the process.

TO HAVE AND TO HOLD unto Land Trust, its successors, and assigns,

WITNESS the following signatures.

> **Commentary.** The foregoing two lines may be archaic in some States.

GRANTING OWNER:

_____

By: _____

Dated: _____ _____, **2009**

_____

By:

Its: President and CEO

_____ **LAND TRUST:**

_____ LAND TRUST

A _____ Nonprofit Corporation

Dated: _____ _____, 2009

_____

By:

Its: President

Exhibits to include or consider

Property Description(s)
Maps
Depiction of Zones or Areas
Maps of Structures, Improvements, Other Features

Baseline Documents
List of Title Exceptions, Encumbrances

Laura Huffman, Texas State Director

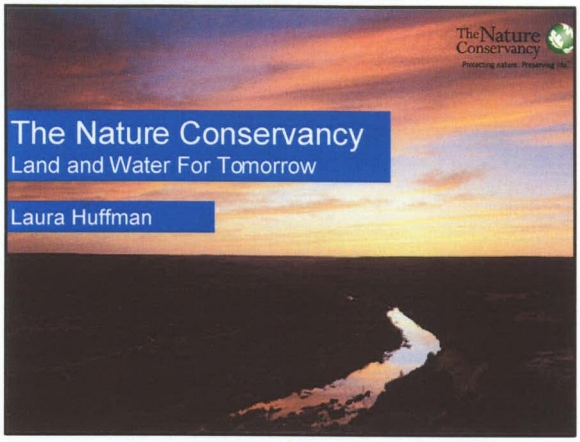
The Nature Conservancy

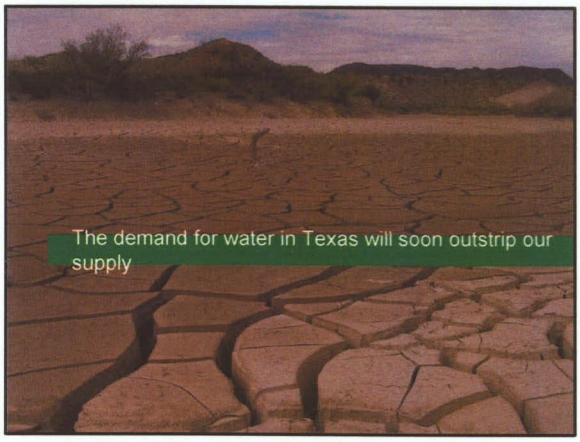
Laura Huffman is the Texas State Director of the Nature Conservancy, a position she's held since June 2008.

A native of Austin, Texas, Ms. Huffman has a long and distinguished record of public service. Throughout her career she has devoted substantial energy toward advancing environmental causes to benefit the lives of citizens, including undertaking important projects to protect water supply quality and public green spaces. As deputy city manager of San Marcos from 1994 to 2002 and assistant city manager of Austin from 2002 to 2008, she spearheaded important watershed protection and neighborhood and economic development initiatives for both cities.

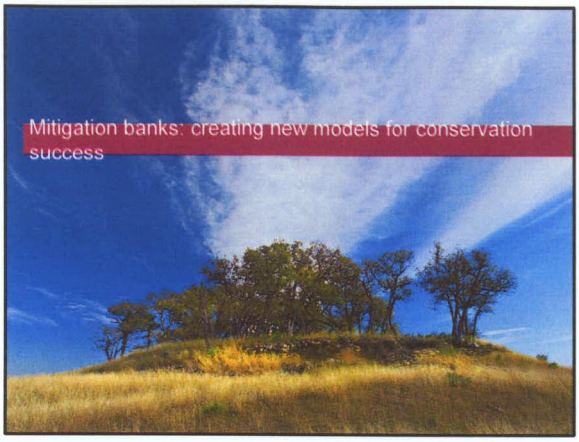
Ms. Huffman has earned a Master of Public Affairs degree from the University of Texas at Austin and a B.Sc. in Political Science with a minor in History from Texas A&M University, College Station, Texas.

Founded in 1951, The Nature Conservancy is a global non-profit organization that uses a science-based approach to protect the world's most ecologically important places and the life they support. The Nature Conservancy of Texas has conserved nearly 750,000 acres of ecologically important lands and waters across the state. Additional information about the work of The Nature Conservancy of Texas can be found at nature.org/texas.


The Nature Conservancy
Land and Water For Tomorrow
Laura Huffman

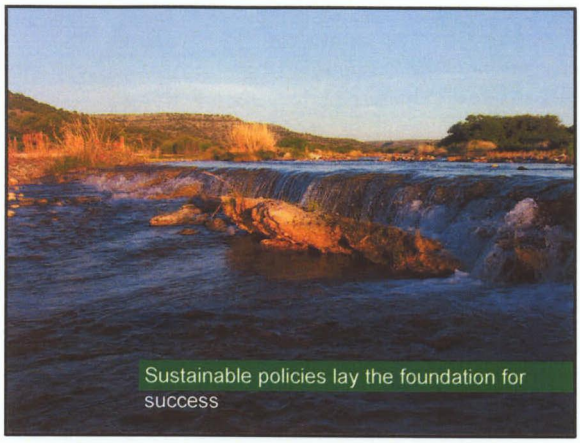

The demand for water in Texas will soon outstrip our supply


Conservation is 1,000 tools used well

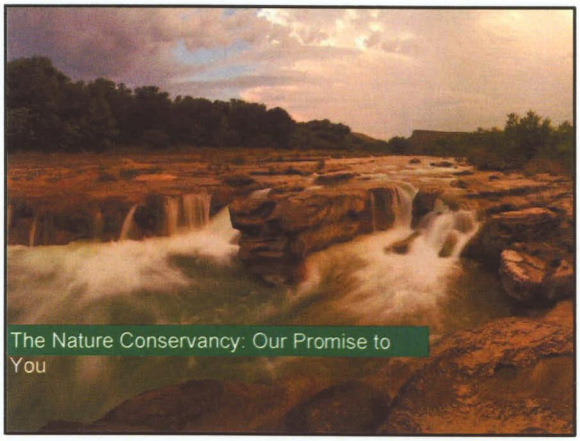

Mitigation banks: creating new models for conservation success


Estate planning: Historic transfers of generational wealth


What if?


Sustainable policies lay the foundation for success


Water conservation is good business


The Nature Conservancy: Our Promise to You

Jeannine Hale is the Director of the Office of Environmental Justice and Tribal Affairs (OEJTA) for Region 6 of the U.S. Environmental Protection Agency (EPA). Her duties include working with other Region 6 Divisions to address community concerns and make sure that appropriate steps are taken to ensure that everyone, especially persons who may be most vulnerable, receives equitable treatment and protection when it comes to environmental issues. She also manages Tribal General Assistance Program (GAP) grants, helps ensure that EPA activities are appropriately coordinated with the 66 Tribes in Region 6, and monitors progress in program implementation and environmental protection in Indian country.

Jeannine's career with EPA began in 2008 as an attorney, and she has served as the Region 6 Tribal Law Advisor, assisted with FOIA and worked in water enforcement. Prior to her federal career, she worked for several years as Administrator of Environmental Programs and Senior Assistant Attorney General for the Cherokee Nation. She also has experience in private practice representing grassroots community organizations, served as Chief of the Environmental Section of the Office of the Oklahoma Attorney General, was employed as a water quality attorney for the Oklahoma DEQ and Water Resources Board, and worked for Legal Aid of Western Oklahoma.

Ms. Hale's accomplishments include being recipient of the Jan Stevens Award from the Region 6 Tribal Operations Committee, appointment to the Oklahoma Department of Agriculture's Food Policy Council, service as a board member on the Oklahoma Scenic Rivers Commission, a Special Recognition Award by Save the Illinois River, and the Water Conservationist of the Year Award by the Oklahoma Wildlife Federation.

Jeannine holds a Bachelor of Science in Zoology and a Juris Doctorate from the University of Oklahoma. She has been admitted to practice law in federal and state courts in Colorado and Oklahoma.

Texas Environmental Superconference
August 6, 2010

Environmental Justice – "You've Got a Friend in Me"

Jeannine Hale, Director
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Email: hale.jeannine@epa.gov

From "Environmental Justice: Building a Unified Vision of Health and the Environment"
By Charles Lee, Director, Office of Environmental Justice, Environmental Protection Agency

- "...People of color, tribal, and low-income communities often suffer adverse and disproportionate exposure to environmental and occupational toxins."
- "These populations tend to be more susceptible and vulnerable by virtue of the social environment."
- "Factors such as economic distress and low socioeconomic status (SES) contribute to the impact of these exposures as well as act independently to lower health status."

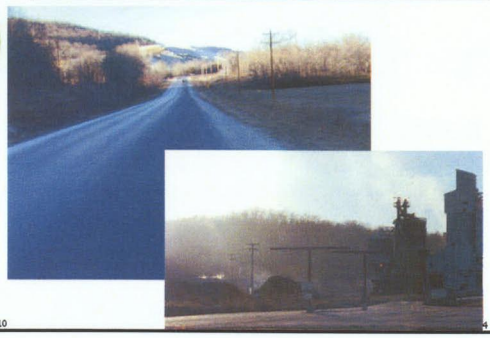
Environmental Health Perspectives
VOLUME 110 | SUPPLEMENT 2 | April 2002 page 141

Mr. Lee: Most of these negative impacts have yet to be documented.

Areas of potential environmental inequities

- lead poisoning
- contaminated fish consumption
- air pollution and ambient air quality
- groundwater contamination
- drinking water safety
- mining waste and nuclear plants
- location of landfills, incinerators, and abandoned waste sites
- proximity to noxious facilities
- unequal enforcement of environmental laws

"Environmental Justice" Is Not A Term Everyone Knows or Uses



Executive Order 12898 Definition of Environmental Justice

President Clinton Issued E.O. 12898 (Feb. 16, 1994; 59 FR 7629)

- Interagency Workgroup
- All Federal Agencies to Develop Strategies, make EJ part of their mission to Greatest Extent Practicable and as Permitted by Law
- Agencies to Address Adverse Human Health or Environmental Effects of Programs on Minority and Poor

Definition Used by EPA

- All People Regardless of Race, Color, National Origin, Income
- Fair Treatment and Meaningfully Involvement
- With respect to Development, Implementation and Enforcement of Environmental Laws, Regulations and Policies

http://www.epa.gov/environmentaljustice/basics/index.html

National Environmental Justice Guidance

- EJ in Rulemaking *July 27, 2010*
  http://www.epa.gov/environmentaljustice/resources/policy/ej-rulemaking.html
- Toolkit For Assessing Potential Allegations Of Environmental Injustice *EPA 300-R-04-002 Nov 2004*
- Environmental Justice Guidance Under The National Environmental Policy Act, Council On Environmental Quality *December 1997*
- A Citizen's Guide to Using Federal Environmental Laws to Secure Environmental Justice, Environmental Law Institute *2002*
- EPA's Environmental Justice Collaborative Problem Solving Model *EPA 300-R-06-002, June 2008*

National Environmental Justice Tools

Multiple Tools- Similar Factors Considered
- Minority status
- Economic indicators of poverty
- Education level
- Number of industrial facilities, proximity to communities
- Population Density

"EJ SEAT"
- Internal EPA tool, uses 12 federal databases, health data.

"EJ View"
- March 9, 2010 - EPA release of EJ View for public use.
- EJView users can overlay demographic, health and environmental information on a map to get a snapshot of multiple factors affecting a community.

http://www.epa.gov/enviro/ej/index.html.

 Note: limitations on usefulness of health and census data

EJ Showcase Community National Overview

- Nov 2009 EPA National Announcement
- 10 EJ Communities Selected Nationally
- Collaborative Community Based Approach
- 2 Year Project
- Use as Models, transfer lessons learned
- Achieve Results
- Bigger Than EPA

EPA Region 6 EJ Showcase Community Selection

- Numerous Communities in Region 6 (AR, LA, NM, OK, TX) Could Qualify
- Region 6 EJ Steering Committee
- Selection Factors Used In Ranking Process
  - Multiple Stressors
  - Number of Regulated Facilities
  - Vulnerability to Natural Disasters
  - Population Demographics
  - Manageable Geographic Location (possible to obtain results in a relatively short time period)

FY 2010 - Region 6 Area EJ Scores

Area	Total Population	Population Density	Population Density Score	Percent Minority	Percent Minority Score	Percent Economically Stressed	Percent Economically Stressed Score	EJ Index Score
Shreveport	306	3850	3	79.55%	5	50.90%	3	45
Mossvile	476	648	2	96.85%	5	40.13%	2	20
St James	1011	535	2	81.21%	5	35.89%	2	20
Norco	670	4853	3	88.51%	5	33.59%	2	30
Manchester	1868	6227	4	94.75%	4	41.45%	4	64
Corpus Christi	1827	3989	3	95.40%	5	63.92%	5	75
Port Arthur	12095	3218	3	97.30%	5	58.34%	5	75

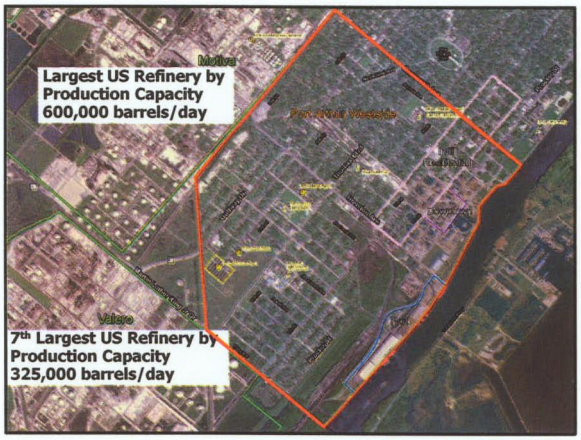
Calculations based on EPA Region 6 Environmental Justice Program, 2000 Census Bureau Data
Boundaries of the study areas were delineated by R6 EJ.

August 2010 10

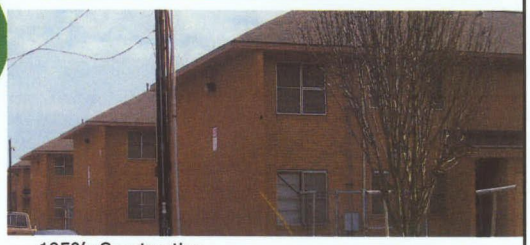
Port Arthur, Texas
Westside Community, Snapshot

- Low income, Minority, Fence line Community
- Blight
- Perceived Crime Issue
- Vacant lots
- No Retail or Commercial Services
- Major Oil & Petrochemcical Industry
- Major Hurricane Impacts
- Complex Social, Environmental, Health, and Economic Challenges

August 2010 11

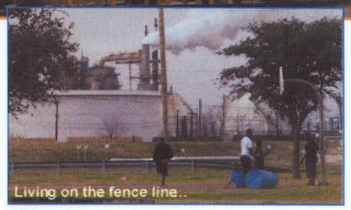


Carver Terrace Housing Project



- 1950's Construction
- 180 Vulnerable Families Living on Two Refineries Fence Lines

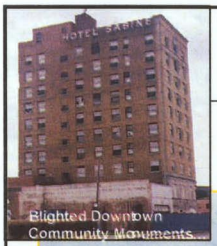
August 2010 13



Living on the fence line..

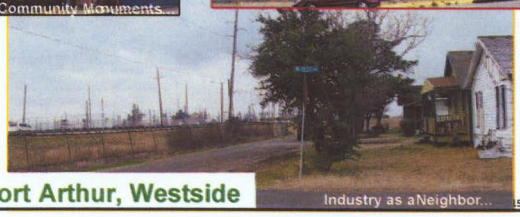
Port Arthur, Westside

August 2010 14



Blighted Downtown Community Monuments...

Boarded up Downtown



Industry as aNeighbor...

Port Arthur, Westside

15

Focus: The Community's Concerns

- Chemical Emergency Response
- Environmental
  - Air Quality
  - Water
  - Land Revitalization
- Health
- Economic Revitalization
  - Jobs
  - Downtown Rebirth

Showcase Activities

- Identify initial list of stakeholders
- R6 EJ Steering Committee Meetings
- Develop and Refine Specific Work Plan

- Jan 19 & March 4 Community Meetings
- March 16 Local 'Lighthouse' Event
- April 10 City Disaster Symposium
- April 28 LEPC Workshop
- May 25 Golden Triangle Empowerment Center Grand Opening
- July 2010 Meeting of R6 and Mayor

Port Arthur EJ Showcase Partners, To Date

Local
City
ISD
Housing Authority
Economic Development Corporation
Jefferson County
SETXRPC

Academia
UTMB Galveston
Lamar University

Federal
DOT
HUD
EDA
DHS, Coast Guard
ATSDR

State
TCEQ
Austin
Beaumont
TGLO
TDHCA

Industry
Motiva
Valero
Port Arthur Industrial Group

Non-Profits
CAID
HOPE
Westside Neighborhood Association

R6 EJ Showcase Project Funding

In 2009, OEJ Provided $100,000 for EJ Showcase Community

Funds Commitments

- 3 R6 EJ Grants to Non-Profits Total $44,000
  - After School Science Lab
  - Job Training Program Support
  - UTMB/CIDA Indoor Air Outreach Project
- 2 R6 EPA Procurements Total $56,000
  - Meeting Facilitation $3,000
  - REPA, Environmental Profile task $53,000

Port Arthur Work Plan

Environmental Profile Concept

- 'State of the Environment'
- Outreach and Visual Materials
- Facilities Permits & Limits Summary
- Public Comment Opportunities
- REPA Contract Support
- Data Trends and Progress Measures

Port Arthur Work Plan

Emergency Response

- Outreach Workshops
- Exercise
- Public Perception vs Required Plans
- Potential for Industry – Community Trust-building, Solutions

Water Quality

- Drinking Water System Evaluation
- Area Waterways Uses & Attainment - 'State of the Water'
- Groundwater Evaluation

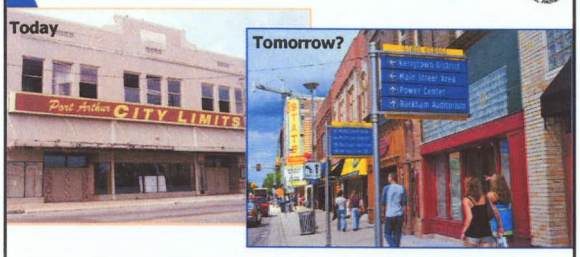
Port Arthur Work Plan, cont.

Air Quality
- State Wide CAA Permits Initiative
- Air Data Evaluation - 'State of the Air'
- Indoor Air
  - Tools for Schools
  - Asthma Outreach
  - UTMB/CIDA Outreach Grant
- After School Science Lab Grant

Brownfields Revitalization
- Environmental Site Assessments
  - Sabine Hotel, News Bldg., World Trade Ctr, Proctor St.
- Area Wide Site Inventory
- Workshop

Job Training Program Support Grant

What Will The Future Bring?



Additional Contactsat EPA Region 6 Ofc. of Environmental Justice & Tribal Affairs:

Deborah Ponder, Deputy Director, 214 665 7461
Shirley Augurson, Associate Director, 214 665 7401

Hilton Kelley

Biography

Hilton Kelley, Founder and CEO, Community In-power & Development Association Inc., Coordinator of the Southeast Texas Bucket Brigade, And Mobile Community Outreach Director for Coming Clean Collaborative. Mr. Kelley is originally from and currently lives in the refinery and chemical manufacturing town of Port Arthur, Texas. In addition to being a community organizer, Mr. Kelley is an electrician and former member of the US Navy, second class petty officer. After the navy, Mr. Kelley remained in California while there he worked as a youth activist where he was recognized for his youth anti-gang violence efforts and acting ability. He was admitted to the Screen Actor's Guild in 1991. Mr. Kelley moved back to Port Arthur in order to help rebuild and save the community from which he came.

Pollution, neglect and deep despair had taken a heavy toll on Port Arthur TX. In

response, Mr. Kelley organized the "Community In-power and Development Association"(C.I.D.A.) and began to challenge the regulatory agencies and there policies and environmental violations of the plants that loom over the community. CIDA collects scientific data about the sources, types, and amounts of pollution emitted by polluting neighbors and educates residents of Port Arthur (who are overwhelmingly low-income individuals and people of color) about the toxic burden they shoulder. While fighting locally, Mr.

Kelley also arranged for CIDA to join the international Shell Global Accountability Campaign and spoke at three Shell Annual Meetings in London and the Hague Netherlands. Mr. Kelley is trained to take air samples using

the "buckets" (of the Bucket Brigade) as well as the high-tech CEREX real time air monitor. He is also qualified to train others on these devices. In 2002 Mr. Kelley testified before the US. Senate on behalf of impoverished communities across the nation and in 2003 received the Environmental Justice Award from Sierra Club Lone Star Chapter. In 2004 he received the Ben & Jerry Award for Environmental Activism.

Awards & Accomplishments

2008: **Damu Smith Environmental Justice achievement award was given to CIDA Inc, Director and founder Hilton Kelley on the 27th of October 2008**

2008: **Hilton Kelley was appointed to the "National Environmental Justice Advisory Council.**

2008: **Hilton Kelley was Given a Proclamation by the city of Port Arthur TX proclaiming July 1 "Hilton Kelley" Day in the city of Port Arthur the award was given by Mayor Deloris Bobby Prince 2008. the Award was given for outstanding service Environmentally in the community.**

2007: **We (CIDA Inc,) were instrumental in getting the Valero oil refinery to assist with health care cost for residents on the west side of Port Arthur and with\ revitalization efforts for the community.**

2007: **Stopped VX nerve Gas waste from being shipped to the Port Arthur TX community by the U.S. Army for a month we filed for an injunction.**

2007: **Guest speaker Beaumont TX court house for the Progressive Democrats of Southeast TX Nov-8TH**

2007: **Nominated for Port Arthur TX citizen of the year received certificate for community dedication Oct-26**

2007: **Keynote speaker at Rice University for the Environmental Club's Conference entitled**
who's Earth is it People, Petrochemicals and Environmental Justice March/24

2007: **Nominate for the "Sri Sri Ravi Shankar Award" for Uplifting Human Values. March/21**

2006: **Won 3.5 million dollars and other amenities for the underserved communities That boarder the Fence line of the Motiva refinery in the City of Port Arthur TX.**

2006: **"Houston Hero" Award by Citizen League for Environmental Action Now (CLEAN)**

2005: **Instrumental in helping to stop HB-1711 and the Joe Barton Bill in Washington DC that would of allowed polluting industry to scale back the clean air laws and regulation**

2005: **Instrumental in having violation charges brought against Premcor refinery by the EPA**

2005: **Woodmen of The World Life Insurance Society "Conservation Award "**

2004: **Freed Family Support Group Award for Innovative Community Advocacy**

2002: **Environmental Justice Award** / Sierra Club Lone Star Chapter

2001: Blocked a permit that would of allowed a refinery to dump 525 tons of toxins into the air

2000: **Keynote Speaker: Future Leaders of America Summit/ High School Students** / Port Arthur TX.

Testified before U.S. Senate regarding environmental health effects of changes in Clean Air Act

Testified before Texas Legislature in support of school air monitoring bill

Presenter at Shell International Shareholder's meeting London / U.K.

Co-Authoring reports on pollution from petrochemical flaring with Eric Schaffer / Environmental Integrity Project (in process)

1995: Started the first anti gang anti drug theater outreach program in a housing project for at risk youth.

Lock wood Gardens Housing project Oakland CA.

1996: received Certificate of appreciation from the City of Oakland CA. for out standing work in the community with the "anti gang violence program"

Mission

The Community In-Power and Development Association Inc (CIDA) is a 501(c) (3) nonprofit organization that work to empower residents in low-income communities in Port Arthur, Texas we help them to take action against the neighboring chemical manufacturers, Refineries and incinerators take action to keep them from polluting our air, land, and water. CIDA Inc. mission is to also transform dilapidated, underserved areas in to desirable communities with a strong commerce base, foster and promote a healthy safe and economically vital community by uniting and educating local residents on the importance of working together with in the impacted communities to promote healthy change. CIDA was founded in 2000 with the belief that chemical polluters should be held accountable for the chronic, systematic poisoning of low-income communities living along the "fence line" of their operations. In keeping with this belief, CIDA Inc. has created a grassroots initiative that:

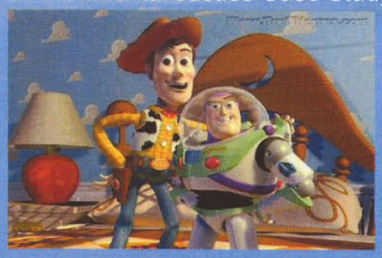
1. Collects scientific data about the sources, types, and amounts of pollution emitted by our polluting neighbors.
2. Educates residents of our community (who are overwhelmingly low-income individuals and people of color) about the toxic burden we shoulder.
3. Work with Low income residents on developing their community into a strong vital community with a healthy commerce activity base.
4. Teach locals how to start and maintain business with in the community.
5. Unites Port Arthur residents to take action against major chemical polluters, advocating for socially responsible refineries and chemical plants and the reduction of toxic emissions.
6. Works with other low-income, communities of color in the United States via the Coming Clean Campaign and internationally in South Africa via the Global Community Monitor.
7. With our national and international partners, approach polluters (such as Shell Oil) at their annual share holder general meetings.

RICH WALSH

Rich Walsh is Vice President and Assistant General Counsel for Environmental, Safety and Regulatory Affairs for Valero. Valero is the largest independent refiner in the U.S. with a nominal petroleum refining capacity of approximately 2.8 million barrels a day and 21,000 employees. In addition to its 15 petroleum refineries, Valero affiliates have petroleum pipelines, terminals, several asphalt plants, 5,800 branded retail gas stations and 10 state of the art ethanol refineries, making Valero one the nation's largest ethanol producer. The Environmental, Safety and Regulatory Affairs group is a 23-person division of Valero's legal department and handles all legal matters, claims, administrative processes, and litigation related to any of the heavy regulatory practices. Much of the work involves interfacing with key regulatory agencies such as the Environmental Protection Agency, the Texas Commission on Environmental Quality, the Department of Transportation, the Federal Energy Regulatory Commission, US Customs Service, and the Occupational Safety and Health Administration. Rich earned his B.A. and J.D from the University of Oklahoma. He has also studied international and English law at the University of Oxford, England. His practice is concentrated in environmental and other regulatory law. Rich also has extensive international legal experience working in South America, Asia and Europe.

You Have A Friend In Me!

Environmental Justice Case Study



VALERO

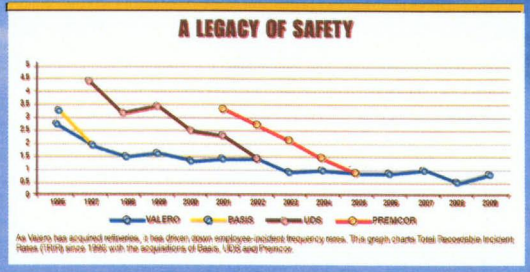
Who Is Valero?

#1 BEST BIG COMPANIES TO WORK FOR 2008 FORTUNE magazine

- Safe & reliable operations
- Environmentally responsible
- Employee focused
- ***Socially Conscious/Community-minded***

VALERO

A Diversity of Safety Cultures



As Valero has acquired refineries, it has driven down employee-incident frequency rates. This graph charts Total Recordable Incident Rates (TRIR) since 1998 with the acquisitions of Basis, UDS and Premcor.

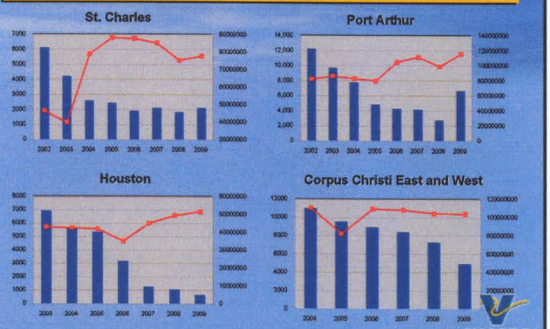
Big Environmental Investments

- **$480 million** in Environmental Capital Projects in 2008
- **$5 billion** invested since 2002
- **$1.9 billion** projected environmental investments over next three years

- Striving to apply best available technology to reduce emissions
- Striving to be a good neighbor by being a good operator
- Working with local communities to meet environmental needs, specifically targeted towards people living around the refineries

VALERO

Real Emission Reductions



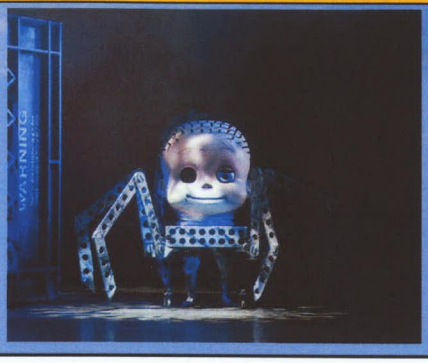
VALERO

Valero Invests In Its Communities

- **$12.6 million** – 2009 United Way Campaign
- **$8 million** –2009 Valero Texas Open and Benefit for Children Golf Classic contribution to children's charities
- **$2 million** for the National Multiple Sclerosis Society in 2008
- **$2.7 million** raised for Muscular Dystrophy Association and 30 Children's Miracle Network hospitals located in communities where Valero has operations
- Food for fuel at every refinery- Valero Energy Foundation helped the Food Bank purchase a refrigerated truck and will pay for its maintenance for the next five years.
- ***Employees volunteered 140000 hours of time in 2008 for countless community projects***

VALERO

First Impression of Environmental Justice?



VALERO

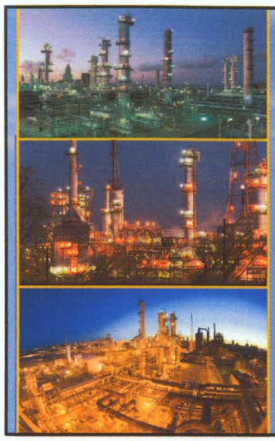
EPA's Definition of "*Environmental Justice*":

"Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and have equal access to the decision-making process to have a healthy environment in which to live, learn, and work."

VALERO

How Do You Translate This into Practice?

VALERO



Early Valero Exploration into EJ

Corpus Christi Experiment

St. Charles Model

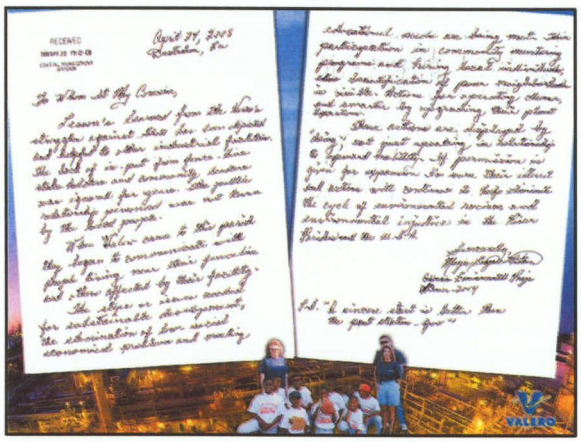
Port Arthur Challenge

Valero's Environmental Justice Policy

Valero strives to operate as a good neighbor and to look for opportunities to work with local officials and directly with its fence-line neighbors to improve quality of life of its neighbors and communities.

Valero aims to treat its fence-line neighbors fairly, regardless of race, color, national origin, culture or income. We work to ensure that our neighbors have an opportunity to understand our proposed activities, and to provide them with a meaningful opportunity to have their concerns heard, with the goal of providing them with greater comfort in our operations.

VALERO



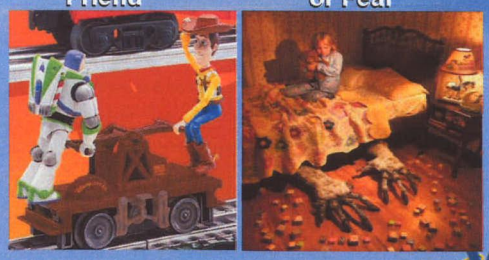
Tips for EJ Exploration

- Don't let rhetoric prevent progress
- Respect comes before trust
- Agree to disagree, and then look for the common ground
- Don't be bullied (Goes for both sides)
- Think way outside the box, but have realistic expectations

VALERO

You Decide

Friend or Fear



VALERO

QUESTIONS

VALERO

MICHAEL J. NASI

- *Partner*
- **Electric Power, Climate Change & Carbon Management, Energy, Environmental, Legislative, Renewable Energy, Toxic Tort**
- B.A., University of Texas
- J.D., University of Houston
- mnasi@jw.com

Michael J. Nasi is the founder of the firm's Climate Change and Carbon Management group and is also active in the firm's Environmental and Energy practice areas. Mr. Nasi's law practice primarily focuses on regulatory permitting in the air, water, injection well, reclamation, and waste programs for facilities in the electric power generation, mining, steel manufacturing, and brownfield redevelopment industries. He is active in state and federal energy, regulatory, and related tax policy development on behalf of individual companies and associations. He practices before the EPA, TCEQ, the Texas Railroad Commission and the Texas Legislature.

MEMBERSHIPS

Mr. Nasi is the Secretary and Sustainability Chairman for the Environmental and Natural Resources Section of the State Bar and a member of the Travis County Bar Association (Administrative Law Section) and the American Bar Association Section of Environment, Energy, and Resources.

COMMUNITY INVOLVEMENT

Mr. Nasi is a Board Member for the Salvation Army – Austin, where he Chairs the Development and Nominations Committees.

AWARDS

Mr. Nasi has been listed as one of the "Top Ten Environmental Attorneys Under 40" by *Environmental Law 360* and has been honored in *Who's Who – Texas* for Environmental Law, in *The Best Lawyers in America* under Environmental Law, as a "Rising Star" by *Texas Monthly Magazine*, and as an "Up and Coming" leader by *Chambers U.S.A.* in the area of Environmental Law. He was also a two-time finalist in the "Austin Under 40 Awards."

ADMITTED

- Texas, 1994
- United States District Court for the Northern District of Texas

EDUCATION

Mr. Nasi attended the University of New Mexico and earned his B.A. degree from the University of Texas at Austin in 1991 with majors in both Government and History. He attended The University of Texas School of Law and earned his J.D. degree from the University of Houston Law Center in 1994, where his studies specialized in environmental law.

PUBLICATIONS & SPEAKING ENGAGEMENTS

Mr. Nasi authors chapters for the Environmental Law Handbook in West Publishing's Texas Practice Series on Environmental Enforcement, Hazardous Substance Spill Reporting & Response, and Brownfield Redevelopment. He has authored articles on air quality, waste permitting, Brownfield redevelopment, environmental enforcement, and other environmental law issues in numerous trade journals and publications, including the *Texas Environmental Law Journal*. Recent articles include:

- Co-author, "If You Build It, They Will Come: The Texas Offshore Carbon Repository and Its Role in the Future of Carbon-Based Energy," *Texas Journal of Oil, Gas, and Energy Law* (Volume 5, No. 1)(2009-2010)

- Co-author, "How Carbon Capture and Storage Can Protect the Planet and the Global Economy," *Petroleum Journal* (February 2010)

- Co-author, "Environmental & Energy Legislative Update on the 81st Texas Legislature: Key Victories for Clean Carbon, Quiet Victories for Renewables, and as for the Rest, a Chub to the Head," *Texas Environmental Superconference* (August 2009)

- Co-author, "Carbon Regulation Backgrounder," The University of Texas School of Law *2009 Carbon and Climate Change*, Austin, TX (February 2009)

- Co-author, "Congressional Update on Selected Carbon Storage Issues," The University of Texas School of Law *2009 Carbon and Climate Change*, Austin, TX (February 2009)

Mr. Nasi is frequently an invited speaker at seminars and conferences related to his areas of energy and environmental law in Texas and throughout the country. Recent presentations include the following:

- "Clean Coal Technology," *The Future of the Electricity Industry*, Austin, TX (June 10, 2010)
- "Legal Impacts on and Strategies for Ash Management in Light of New Federal Regulations Regarding CCB Disposal and Mine Placement," *Future of Coal Combustion Products Regulatory, Legal Technical and New Markets*, Houston, TX (March 29-30, 2010)
- "The Texas Edge:, Legislative and Policy Initiatives and Experience with and Demand for CO2," *University of Texas School of Law Carbon and Climate Change Conference,* Austin, TX (February 18, 2010)
- "Texas Hold 'Em -State of Texas Biodiesel Industry," *National Biodiesel Board Annual Conference & Expo*, Grapevine, TX (February 8, 2010)
- "General Assembly II – Clean Carbon Technology Costs and Incentives," *Clean Carbon Policy Summit and Expo*, Austin, TX (October 27, 2009)
- "GHG Legislation or Regulation – Impairing Texas Plans to Meet Growing Electric Power Needs," *Texas Public Policy Foundation Policy Primer: Aces Wild! Cap & Trade and a Look at the American Clean Energy & Security Act,* Austin, TX (September 17, 2009)
- "Carbon Capture and Storage (CCS) Legislative Update," Texas Alliance of Energy Producers, Abilene, TX (September 14, 2009)
- "Energy, Environmental & Natural Resources Legislative Update," *Industry Council on the Environment Legislative Updates: Energy and Environmental Issues,* Austin, TX (July 16, 2009)
- "Lignite Legislative Update – 81st Texas Legislature," *Texas Mining and Reclamation Association Annual Meeting*, Boerne, TX (July 16, 2009)
- "Energy, Environmental & Natural Resources Legislative Update," *Jackson Walker Legislative Update,* Houston, TX (July 7, 2009)
- "Energy, Environmental & Natural Resources Legislative Update," *Jackson Walker Legislative Update Breakfast,* Houston, TX (June 9, 2009)

- "Transportation Fuels," *US-Mexico Border Energy Forum XVI*, Houston, TX (October 14, 2009)
- Master of Ceremonies, Texas General Counsel Forum's *3rd Quarterly Event – Houston Chapter*, Houston, TX (July 22, 2009)
- "Renewable Fuels/Biofuels," *Amp Up Your Fleet: 2009 Advancing the Choice Conference*, Humble, TX (June 24, 2009)
- "Clean Coal: State of the Industry Panel" and "Bio Energy: Novel Technologies & Projects" *Clean Technology Conference and Expo 2009*, Houston, TX (May 4-5, 2009)
- "Clean Coal Technology – Realistic Energy Planning for the 21st Century," Geological Society of America – South-Central Section's *43rd Annual Meeting*, Dallas, TX (March 16, 2009)
- "Carbon Storage Options and Opportunities," Gasification Technologies Council's *2009 Winter Meeting*, Austin, TX (February 5, 2009)
- "Sequestration Case Study" and "Incentives for Carbon Capture and Storage," *Carbon and Climate Change Conference*, Austin, TX (February 3-4, 2009)
- "Current Incentives for Clean Technology," *2008 Clean Carbon Policy Summit & Project Expo*, Austin, TX (October 9, 2008)
- "State Regulatory and Legislative Policy Update," *3rd Annual Texas Biofuels Conference*, Austin, TX (September 18, 2008)
- "Energy Planning Texas Style – We Need it All," *2008 Texas Environmental Superconference*, Austin, TX (August 7, 2008)
- "Understanding and Working with the Current Incentives for CCS in Texas," UT CLE, *2008 The University of Texas at Austin Carbon and Climate Change*, Austin, TX (April 25, 2008)
- "Latest Developments in Carbon Capture & Sequestration," *Air & Waste Management Association Environmental Law & Regulatory Symposium*, Austin, TX (April 24, 2008)

Rafael M. Anchia
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Areas of Practice

- Finance
- Latin America/Caribbean
- Spain

Education

- J.D., Tulane University Law School, 1993
- B.A., Southern Methodist University, 1990, *cum laude*
- Southern Methodist University in Spain, Madrid, 1989

Bar Admissions

- Texas

Languages

- Spanish

Rafael represents financial institutions and public and private funds in a variety of transactions involving, among other things, senior and subordinated debt and equity, domestic and international syndications and distressed debt acquisitions and sales. He also represents issuers and underwriters on tax-exempt bond transactions.

Rafael is also actively involved in community affairs and public service. Representing District 7 on the Dallas ISD Board of Trustees from 2001-2004, he oversaw a $1 billion budget, 19,000 employees and almost 220 schools in the nation's 12th largest school district.

After retiring from the Dallas School Board, Rafael has been elected three times as Texas State Representative for District 103, which includes parts of Dallas, Irving, Carrollton and Farmers Branch. *Texas Monthly* named him "Rookie of the Year" during the 79th Legislative Session and one of the "10 Best Legislators" during the 80th Legislative Session. Rafael is Vice-Chair of the Pensions, Investments and Financial Services Committee.

Selected Professional Activities and Honors

- American Marshall Memorial Fellow (2001)
- Broad Foundation Fellow (2003)
- British-American Project Delegate (2003)
- JCPA/JCRC Institute for Hispanic American Leadership (2005)
- LULAC National "Man of the Year" (2005)
- Flemming Institute Fellow (2006)
- Aspen Institute - Rodel Fellow (2007)
- MALDEF's Matt Garcia Public Service Award (2009)
- Texas Lawyer's Extraordinary Minority in Texas Law (2009)
- American Jewish Committee's Institute of Human Relations Award (2009)

Memberships

- NALEO Education Fund Board - Immediate Past Chairman
- Education is Freedom, Board Secretary
- SMU Clements Center for Southwest Studies Advisory Board
- Leadership Dallas Alumni Association
- Dallas Assembly
- Oak Cliff Lions Club

Chairman Bryan W. Shaw

Dr. Bryan W. Shaw of Bryan was appointed to the Texas Commission on Environmental Quality by Gov. Rick Perry on Nov. 1, 2007. The Texas Senate confirmed his appointment on May 5, 2009 and he was appointed chairman on Sept. 10, 2009. His term will expire on Aug. 31, 2013.

Shaw is an associate professor in the Biological and Agricultural Engineering Department of Texas A&M University (TAMU) with many of his courses focused on air pollution engineering. The majority of his research at TAMU concentrates on air pollution, air pollution abatement, dispersion model development and emission factor development. Shaw was formerly associate director of the Center for Agricultural Air Quality Engineering and Science, and formerly served as Acting Lead Scientist for Air Quality and Special Assistant to the Chief of the U.S. Department of Agriculture Natural Resources Conservation Service.

Shaw is a member of several committees for the U.S. Environmental Protection Agency (EPA) Science Advisory Board, including the Environmental Engineering Committee, Committee on Integrated Nitrogen, and served on the Ad Hoc Panel for review of EPA's Risk and Technology Review Assessment Plan. Additionally, he is a member of the U.S. Department of Agriculture - Agricultural Air Quality Task Force. Since his appointment to the TCEQ, Shaw has served on the Texas Environmental Flows Advisory Group and as chair of the Texas Advisory Panel on Federal Environmental Regulations.

Shaw received a bachelor's and master's degree in agricultural engineering from TAMU and a doctorate degree in agricultural engineering from the University of Illinois at Urbana-Champaign.

Lawrence E. Starfield
Deputy Regional Administrator

Larry Starfield is the Deputy Regional Administrator for the U.S. Environmental Protection Agency, Region 6, located in Dallas, Texas. As Deputy Regional Administrator, he is responsible for the efficient management of the 900-person regional office, and for the effective implementation of EPA programs in the South-Central United States.

From 1997-2001, Mr. Starfield served as the Regional Counsel for Region 6 where he managed an office of 60 lawyers that provided legal advice to the Regional Administrator and Region 6 program offices regarding the interpretation and implementation of federal environmental laws.

Before joining Region 6 in 1997, Mr. Starfield spent ten years with EPA's Office of General Counsel in Washington, D.C., where he served as an attorney-advisor, Assistant General Counsel for RCRA, and Acting Associate General Counsel for Solid Waste and Emergency Response.

Before coming to EPA, he worked in Paris, France, from 1985 to 1987 as the correspondent for the "Bureau of National Affairs" on French environmental issues.

From 1981 through 1985, he was an Associate with the law firm of Skadden Arps Slate Meagher & Flom, in Washington, D.C. He is a graduate of Wesleyan University and Yale Law School.

For more information, please contact the EPA Region 6 Office of External Affairs at 214 665-2200

OUR ATTORNEYS
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DOWNLOAD V-CARD

Mr. Brooke-Davidson is a shareholder in the firm's Austin, Texas office. He has practiced environmental law since 1985, when he received his law degree from The University of Texas School of Law. His practice has included all facets of environmental law: he has experience with all the significant federal environmental laws and their Texas counterparts; his practice has involved litigation, arbitration, enforcement, permitting, transactions, and counseling; he has worked with various industries including chemicals, energy, agriculture, manufacturing, and real estate; and he has practiced in government as well as in private firms. He is listed in Best Lawyers in America in the field of environmental law.

Mr. Brooke-Davidson received his bachelor's and master's degrees from the Massachusetts Institute of Technology, where his graduate work focused on environmental technology and policy issues. Prior to attending law school, he worked as an environmental consultant, focusing on air quality matters. He graduated from The University of Texas School of Law with honors; he was also a member of the Order of the Coif and served as Editor-in-Chief of *The Review of Litigation.* He was selected into the Honors Attorney Program of the United States Department of Justice, where he served in the Environmental Enforcement Section for twelve years, first as trial attorney and then as a supervising attorney, receiving three Special Achievement Awards and a Special Commendation. He has been in private practice in Austin since 1997.

Mr. Brooke-Davidson is a member of the State Bar of Texas and is also admitted to practice in the United States District Courts for the Western, Northern, Southern, and Eastern Districts of Texas, the United States Courts of Appeal for the Fifth, Seventh, and Tenth Circuits, and the United States Patent and Trademark Office. He is a Vice Chair of the Environmental Enforcement and Crimes Committee of the American Bar Association Section of Environment, Energy, and Resources and is a member of the Litigation Section and the Administrative Law and Regulatory Practice Section of the American Bar Association. He is a member of the Environmental Law Institute, the Air and Waste Management Association, the State Bar of Texas Environmental Section, the Austin Bar Association Environmental Section, and the Houston Bar Association Environmental Section. He also serves on the Planning Committee for the Annual Texas Environmental Law Superconference.

Mr. Brooke-Davidson has given numerous presentations on a variety of environmental law topics and has authored several articles. His recent articles includes: "The Continuation Of The Continuing Violation Fight: Supreme Court Asked To Decide Split Among Circuits On Continuing Violation Controversy," American Bar Association, Section of Environment, Energy and Resources, Environmental Enforcement and Crimes Committee Newsletter (April 2008); "The Continuing Fight Over the Continuing Violation: Another Battle at Bull Run," American Bar Association, Section of Environment, Energy and Resources, Environmental Enforcement and Crimes Committee Newsletter (November 2007); "Working With Expert Witnesses," Seventeenth Annual Texas Environmental Superconference (August 5, 2005).

Our Attorneys
Joseph F. Guida
John Slavich
Jean M. Flores
Howard L. Gilberg
James D. Payne
David E. Whitten
Tonya L. Meier
Carrick Brooke-Davi
Paul Seals
Greg Rogers
Michael C. Lawrence
Kyle Ballard
Sally A. Longroy
Erika Erikson
Michael R. Goldman
William R. (BJ) Jone

STEPHANIE BERGERON PERDUE

Deputy Director
Office of Legal Services
Texas Commission on Environmental Quality

Stephanie Bergeron Perdue was appointed Deputy Director of the Texas Commission on Environmental Quality's (TCEQ) Office of Legal Services in May 2006 after serving as Acting Deputy Director since November 2005. She joined the Environmental Law Division as Director in September 2001. She previously served as Executive Assistant to former Chairman Robert J. Huston from August 1999 thru September 2001 which afforded her the opportunity to participate in the Sunset Review Process of what was then the Texas Natural Resource Conservation Commission. As a result, she also worked on a variety of Sunset-related legislative implementation rulemakings such as participation by the Executive Director in contested case hearings. And as a result of legislation in the 2009 session which re-scheduled TCEQ's Sunset review from 2013 to 2011, Stephanie will again have the opportunity to participate in the Sunset Review Process of the TCEQ.

She was introduced to National Ambient Air Quality Standards (NAAQS)/State Implementation Plan issues upon her arrival at the agency in 1999 and continues to be involved with these issues as a result of EPA's adoption of more stringent NAAQS, including ozone, NO2 and lead. Additionally, Stephanie has been actively involved in discussions with the Environmental Protection Agency regarding the TCEQ's Flexible Permit Program.

Her introduction to water issues, including TMDLs, Section 401 Certification, creation of the North Harris County Regional Water Authority and State/Regional Water Plans, occurred in 1997 when she joined the staff of Senator Lindsay's Office. She worked for Senator Lindsay for two sessions prior to joining the agency. The 2009 drought highlighted the importance of the state's continued long-term planning efforts as part of the Senate Bill 1 process.

Stephanie received her Bachelor of Science in Communications from University of Texas at Austin in 1990 and Doctor of Jurisprudence from South Texas College of Law in 1995.

Kathleen C. Decker received her Bachelor of Arts from Texas Tech University in 1978 and her Doctor of Jurisprudence from Texas Tech University in 1981. After working for both the City of Amarillo and the City of Dallas as a prosecutor, she entered into private practice with a focus in criminal law. She later moved to Atlanta, Georgia and worked for a life, health and disability carrier in the litigation section of the legal department. Ms. Decker returned to Texas in 1991 and began her career with the State of Texas by joining the Texas State Board of Medical Examiners as an enforcement attorney and later, the Texas Department of Insurance. Ms. Decker was hired as a hearing officer (administrative law judge) by the Texas Workers' Compensation Commission in 1996 and joined the Texas Commission on Environmental Quality in 2005 as a staff attorney. She became the Litigation Division Director in 2008.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TRAVIS COUNTY

Travis County District Attorney

Enforcement

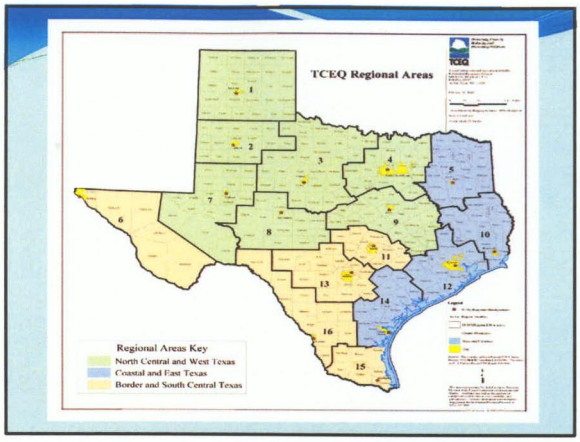
TCEQ Philosophy:

Enforcement, when necessary, must be swift, sure, and just

Field Operations

16 regions and 2 satellite offices

North Central and West Texas
Coastal and East Texas
Border and South Central Texas



Field Operations

- 61,823 Compliance Investigations conducted in FY '09
- 4,875 Complaints investigated in FY '09
- 2,165 Enforcement actions referred in FY '09

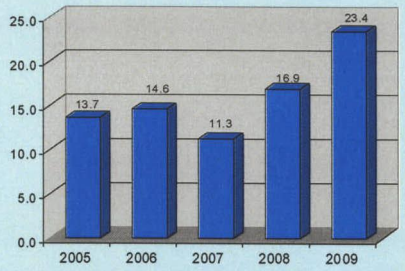
Enforcement Division

- Cases initiated when Notice of Enforcement (NOE) issued
- 60 days to settle
  - Agreed Order – 20% penalty deferral available
  - Compliance Agreement
  - Administrative Resolution
- Referral to Litigation Division if case does not settle

Litigation Division

- **Civil Enforcement – Attorney assigned to case**
  - Penalty Calculation Worksheet – 20% deferral removed
  - Agreed Order negotiated or case referred to SOAH for contested case hearing
  - Referral to Texas Office of Attorney General
- **Criminal Enforcement – Environmental Crimes Unit investigator refers case to prosecutor**

Assessed Penalties



Criminal Enforcement

- **Environmental Crimes Unit (ECU)**
  - Part of the Litigation Division
  - 2 full-time attorneys and 11 investigators
- **Created in 1991**
- **Enforces provisions of the Texas Water Code and Texas Health & Safety Code**
- **Screen and investigate cases, execute search warrants, provide testimony and prosecutorial support for grand jury presentations and criminal trials**

Criminal Case Initiation

- Receipt of information from public or employees
- Referral of case from Program area in TCEQ
- Local law enforcement
- Regional Office staff/investigators

When is criminal enforcement of environmental laws appropriate?

- Knowing or intentional violations of the laws
- When the person has a history of violations
- When there has been falsification or fraud which affects program integrity
- When there is harm to human health or the environment

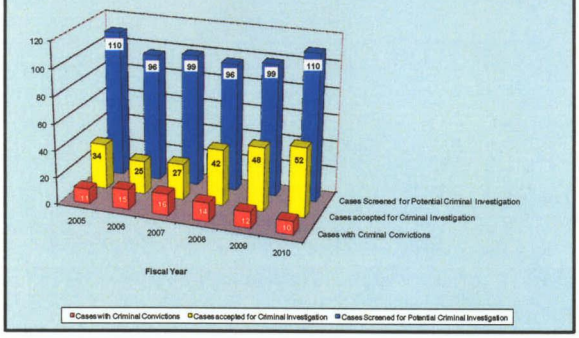
Environmental Crimes Unit

FY 2005 – 2009

Media Percentages for Convictions:

Water – 38%
Waste – 31%
Air – 23%
Multimedia – 8%

Criminal Investigation Activities



Environmental Crimes Unit

- Tyler Pipe – March 22, 2005
  - Ordered to pay $4.5 million fine for violation of Clean Air Act Preconstruction Requirements
  - First criminal prosecution under the preconstruction requirements section of the Clean Air Act
  - Received 5 years probation

Environmental Crimes Unit

- BP Texas City Refinery – March 12, 2009
  - Ordered to pay $50 million fine for March 2005 explosion that killed 15 people and injured over 170 others
  - First prosecution under section of the Clean Air Act specifically enacted to prevent accidental releases that may result in death or serious injury
  - Prosecuted by DOJ and US Attorney's Office (Southern District) in cooperation with FBI, OSHA, EPA and TCEQ

Environmental Crimes Unit

Texas Emissions Reduction Plan Program

- **Randal McLerran – December 5, 2008**
  Securing Execution of a Document by Deception by falsifying loan application for a truck purchased through TERP rebate grant program
  7 years probation and $27,989.95 in restitution

- **C.D. Stang - November 24, 2009**
  12 Counts of Engaging in Organized Criminal Activity and Tampering with a Governmental Record by submitting false information on grant applications
  5 years in prison

Environmental Crimes Unit

- **Lyle and Kevin Hester – May 27, 2009**
  - Ordered to pay $391,442.57 in restitution
  - Father and son sentenced to (respectively) 14 and 20 months in Federal prison
  - Investigators found 113 chlorine gas cylinders buried on defendants' property

Environmental Crimes Unit

- **Sentencing Examples for Illegal Dumping Cases:**
  - 10-years in prison – dumping used oil, running illegal landfill
  - $50,000 fine – dumping hog carcasses into dry creek bed
  - 12 months in jail – illegal disposal of construction & demolition waste
  - 2-years in prison – illegal storage and disposal of hazardous waste (Travis County)
  - 6-years in prison – illegal disposal of hazardous waste (Travis County)
  - 23-months in prison; 7 years probation (collectively for 3 defendants); $80,000 in restitution – illegally importing, storing, and disposal of hazardous waste
  - $50,000 restitution; 2 years probation(collectively) – illegal disposal of hazardous waste

Environmental Crimes Unit

- Sentencing Examples for Landscape Irrigation Cases:
  - $10,100 in restitution; $500 fine; 5 years probation - accepting payment for irrigation system installations and absconding prior to providing services
  - $500 fine; 18 months probation; 80 hours community service – changing the expiration date of an irrigators license
  - 5 years probation; $7,356.10 in restitution – securing execution of a document by deception/fraudulently representing himself as a licensed irrigator

Environmental Crimes Unit

- Sentencing Examples for Water Quality Cases:
  - $2 years probation; $1,000 fine; 80 hours community service - discharging industrial waste into the Houston Ship Channel
  - $50,000 fine; 3 felony counts – discharging industrial waste into the Houston Ship Channel
  - $255,000 restitution; $10,000 fine; $100,000 SEP – discharging industrial waste (Williamson County)
  - 5-year prison sentence; 2 years probation; $1,000 fine – illegal discharge of septic waste from a tanker truck
  - 5 months in jail; ten years probation; $10,000 fine – illegal discharge of septic waste

Travis County Prosecutor

- November 19, 2009 - Agreement between TCEQ and Travis County District Attorney to fund full time environmental prosecutor
- Prosecutor to work cases referred by TCEQ or the Texas Environmental Enforcement Task Force


TEXAS COMMISSION
ON ENVIRONMENTAL QUALITY
Kathleen C. Decker, Director
Litigation Division
TCEQ
512-239-6500
Texas Environmental Superconference
August 5-6, 2010

Patricia H. Robertson

Assistant Travis County District Attorney
Chief, Environmental Crimes Unit
Blackwell/Thurman Criminal Justice Building, Suite 1.100
Austin, Texas 78701
512-854-9447

EDUCATION:

- B.A. (concentration in political science), The University of Texas, San Antonio (1979)
- J.D., The University of Texas Law School (1983)

BAR ADMISSIONS:

- State of Texas
- United States District Court (Western District, Texas)

PROFESSIONAL EXPERIENCE:

- Assistant District Attorney, Travis County, Texas (1987-present)
  - Chief, Environmental Crimes Unit;
  - Chief, White Collar Crime Unit,
  - Chief, Public Integrity Unit, Special Prosecutions Division;
  - Chief, 331st District Court Trial Court;
  - Specialized areas include environmental crimes, public corruption, health care fraud, business fraud, securities fraud, white collar crime and fuels tax fraud

- Assistant County Attorney, Travis County, Texas (1984-1987)
- Staff Member, U.S. Congressman Henry B. Gonzalez, United States House of Representatives, Washington, D.C. (1979-1980)

TEACHING EXPERIENCE:

- Lecturer, "Parallel Criminal and Civil Prosecutions", Administrative Law Conference, State Bar of Texas – Austin, Tx.
- Lecturer, "How to Prepare the White Collar Criminal Case"; IRS Financial Crimes Seminar, Austin, Tx. 1995;
- Panel Discussion, "Preparing the White Collar Case" - 1st Annual Texas State Government Fraud Conference; Austin, Tx. Nov. 1997;
- Panel Discussion, "Preparing the White Collar Case" - 2nd Annual Texas State Government Fraud Conference, Austin, Tx. Nov. 1998;
- Lecturer, "Search Warrants", Texas Comptroller Fraud Conference, S.A., Tx. Jan. 1999;
- Speaker, "Ethics in State Government", TASSCUBO Winter Meeting, Austin, Tx. Jan. 1999;
- Speaker, "The Texas Penal Code", The SAO Fraud Conference, Austin, Tx. April 1999
- Speaker, "Preparing the Environmental Crimes Case", SEEN Conference, Harlingen, Texas, April, 1999,
- Speaker, "Preparing the Environmental Crimes Case", North Texas COG Environmental Conference, July, 1999
- Speaker, "Preparing the Environmental Crimes Case, SEEN Conference, Beaumont, Texas, Oct., 1999
- Speaker, "Parallel Proceedings", 3rd Annual Fraud Conference, Austin, Texas, Jan. 2000

- Speaker, "Anti-Corruption: Ethics, Accountability and Transparency in Government", African Delegation, Austin, Texas, March, 2000
- Speaker, The Texas Penal Code and White Collar Prosecutions, Fraud Seminar, Austin, Texas, April, 2000
- Speaker, "Preparing the Environmental Crimes Case", SEEN Conference, Austin, Tx. April, 2000
- Speaker, "MPR Ethics in Government", Delegates from West Bank, Antigua, Uganda, Malawi, Nepal and Latvia, May, 2000
- Panel Discussion, TNRCC Environmental Trade Conference, Austin, Tx. May, 2000
- Speaker, "Building a Case for the Prosecution" Environmental Enforcement Workshop, Ark-Tex Council of Governments, Mt. Pleasant, Tx., September 15, 2000
- Speaker, "Preparing the Environmental Crimes Case", SEEN Conference, Richardson, Tx. October, 2000
- Speaker, "Enforcement Developments – Enforcement by Local Government", CLE International Texas Water Law Conference, Austin, Tx., October, 2000
- Speaker, "Preparing the Environmental Crimes Case", SEEN Conference, Austin, Tx., April 11, 2001
- Panel Discussion, TNRCC Environmental Trade Conference, Austin, Tx., May 1, 2001
- Speaker, "Preparing the Environmental Crimes Case", SEEN Conference, February, 2002, Laredo, Texas
- Speaker, "Preparing the Environmental Crimes Case", SEEN Conference, April, 2002, Houston, Texas
- Speaker, "Preparing the Environmental Crimes Case", SEEN Conference, October, 2002, San Antonio, Texas
- Panel Discussion, "Criminal Enforcement", CLE International Texas Water Law Conference, October, 2002
- Panel Discussion, "Criminal Enforcement", CLE International Texas Water Law Conference, October, 2003
- Speaker, "Environmental Laws in Texas", TCEQ Conference, October, 2004, Austin, Texas
- Speaker, "Identity Theft", Texas Society of CPA's, Sept. 2005, Austin, Texas
- Speaker, "Environmental Crimes Prosecutions in Texas", American Bar Assocation, Jan. 2010, Austin, Texas.
- Speaker, "Environmental Crimes Prosecutions in Texas", 2010 Southwest States RC&D Training Conference, March, 2010, Ft. Worth, Texas.
- Speaker, "Environmental Crimes Prosecutions", Criminal Environmental Law Enforcement Spring 2010 Training, Austin, Texas.
- Speaker, "Travis County Environmental Crimes Prosecutions", 2010 Texas Environmental Law Enforcement Association, April 2010, Bandera, Texas.
- Speaker, "Travis County Environmental Crimes Prosecutions", Certified Fraud Examiners, May, 2010, Austin, Texas.
- Speaker, "Travis County Prosecutions", Harris County Bar Association, Environmental Section Luncheon, May 12, 2010, Houston, Texas.
- Speaker, "Travis County Criminal Prosecutions", Air and Waste Management Assoc., June, 2010, Austin, Texas.

MEMBER:

- Texas District and County Attorney's Association; Texas State Bar Foundation; Texas Environmental Enforcement Task Force; Southern Environmental Enforcement Network

Patty Robertson
Assistant District Attorney
Chief, Environmental Crimes Unit
Travis County District Attorney's Office
Austin, Texas

Patty Robertson is an Assistant District Attorney for the Travis County District Attorney's Office in Austin, Texas where she has been prosecuting felonies since 1987. She has been the Chief Prosecutor for the 331st District Court, the Public Integrity Unit, the White Collar Crime Unit and now the Environmental Crimes Unit. Patty has been prosecuting environmental crimes in her spare time since 1994 and is now the full-time environmental prosecutor with statewide venue.

Patty has been advising law enforcement agencies on environmental matters since 1994 and is also a frequent presenter at environmental seminars throughout the state.

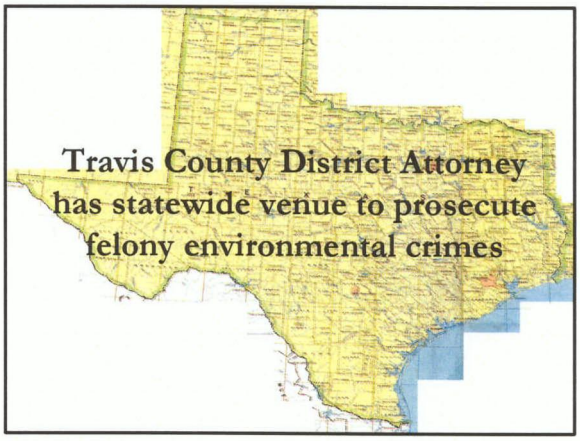
Patty earned her undergraduate degree in 1979 from the University of Texas at San Antonio, worked for a year in Washington, D.C. as a congressional staff assistant, then obtained her law degree from the University of Texas Law School in 1983.

Travis County District Attorney
Environmental Crimes Unit

TRAVIS COUNTY

THE STATE OF TEXAS

TEXAS COMMISSION
ON ENVIRONMENTAL QUALITY



Travis County District Attorney has statewide venue to prosecute felony environmental crimes

EXECUTIVE ORDER
BY THE
Governor of the State of Texas

THE STATE OF TEXAS
EXECUTIVE DEPARTMENT
OFFICE OF THE GOVERNOR
AUSTIN, TEXAS

AWR 91-18

CREATING THE TEXAS ENVIRONMENTAL ENFORCEMENT TASK FORCE

WHEREAS, Texas leads the nation in generation of toxic substances and also faces serious and diverse environmental problems that include polluted air in the state's major urban areas, contaminated surface and drinking water, degradation of coastal areas and critical wildlife habitats, and solid waste disposal needs; and

WHEREAS, Texas would be better served by more cohesive and consistent enforcement of state and federal environmental laws and regulations; and

WHEREAS, numerous state agencies have responsibilities for enforcement of Texas' environmental protection laws and regulations; and

WHEREAS, state agencies also share responsibility for environmental enforcement with several federal agencies; and

The Task Force shall meet monthly or at the call of the Chair.

The goal of the Task Force is to increase federal and state cooperation in prosecuting criminal violations of state and federal environmental laws.

Designated staff of the participating state agencies will cooperate with the U.S. Attorney's Office, the U.S. Environmental Protection Agency, and the Federal Bureau of Investigation in conducting inspections, taking and analyzing samples, and performing other functions necessary to support criminal investigations and prosecutions. The state agencies will also cooperate with the federal agencies in identifying and initiating criminal investigations.

The designated staff within the governor's office will coordinate the efforts of the Task Force and serve as the primary contact person with the federal agencies. The Texas Water Commission will provide a staff person to chair the Task Force.

The participating agencies shall absorb the costs of the Task Force activities within their respective agencies.

Given under my hand this the 11 day of December, 1991.

Ann W. Richards

ANN W. RICHARDS
Governor of Texas

SEAL OF STATE OF TEXAS

TEXAS ENVIRONMENTAL TASK FORCE & TRAVIS COUNTY, TEXAS

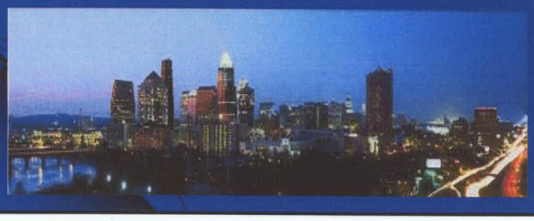
- Travis County District Attorney's Office has been a member of the Texas Environmental Task Force since 1994.
- Texas Environmental Task Force – TCEQ, Tx Parks & Wildlife, EPA, other state and federal agencies.

Statewide venue statutes

- Section 7.189 of the Texas Water Code
- Section 365.005 of the Texas Health and Safety Code
- venue may be in Travis County for the prosecution of criminal environmental offenses.

STATEWIDE VENUE

Cases will be prosecuted in Austin, Travis County, Texas



ENVIRONMENTAL CRIMINAL OFFENSES

- Ch. 7, Texas Water Code
  - Intentional or Knowing Unauthorized Discharge of Waste or Pollutant into Water in the State;
  - Hazardous Waste offenses
  - Medical Waste offenses
  - Emission of Air Contaminant offenses
  - Used Oil violations;
- Ch. 365, Texas. Health & Safety Code
  - Illegal dumping;

CATEGORIES OF ENVIRONMENTAL CRIMINAL CASES

- (1) Harm or risk of harm to the environment or public health;
- (2) Fraud, deception;
- (3) Intentionally violating regulatory system;
- (4) Repeat offenders of environmental laws;

Texas Penal Code offenses used in conjunction with environmental crimes prosecutions

- Program fraud offenses may be prosecuted as:
  - Sec. 37.10 Tampering w/ Government Record
  - Sec. 32.46 Securing Exec. of Doc. by Deception
  - Sec. 31.03 Theft

State v. Gulf Chemical & Metallurgical Corporation

- Freeport, Tx. catalyst recycling subsidiary of Eramet.
- Anonymous complaint in summer 2009.
- Search warrant run in Feb. 2010.
- Corporation convicted in May 2010.

State v. Gulf Chemical & Metallurgical Corporation

- Pled guilty to 11 counts of unauthorized discharge, 7.145 Texas Water Code.
- Paid maximum fines totaling $2.75 million.
- Has one year to complete plant upgrades or face additional criminal charges.

State v. Heartland Automotive Services, Inc./Jiffy Lube – Unauthorized Discharge case

- **Heartland, the largest Jiffy Lube franchisee in the U.S., owns 438 stores nationwide and 34 stores in Austin.**

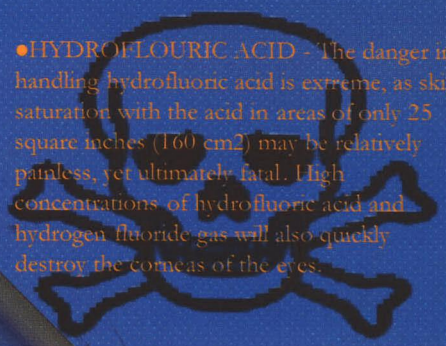
Facts of Jiffy Lube

- During rain events, water seeped through crumbling below-ground walls and filled the area that employees used to change oil in customers' cars.
- The water mixed with used motor oil that leaked from faulty drums stored in the pits, creating a toxic bath that sometimes was more than a foot high.
- Instead of paying to dispose of the toxic soup, employees pumped it into a sink, and it went down the drain and into the city sewer system.

PUMPING INTO SINK

State v. Todd Mathewson
State v. Process Stainless, Inc.
hazardous waste case
Hutto, Williamson County, Texas

- Electro polishing business -
- EP baths contaminated w/ Hydrofluoric Acid (HF). The contaminated bath was removed from 2 tanks and placed in 28 - 55 gallon drums.
- Prior to an audit by customer Applied Materials, Mathewson hid the drums of hazardous waste in another building.
- This waste remained in this building for three years until it was discovered.



- HYDROFLOURIC ACID - The danger in handling hydrofluoric acid is extreme, as skin saturation with the acid in areas of only 25 square inches (160 cm2) may be relatively painless, yet ultimately fatal. High concentrations of hydrofluoric acid and hydrogen fluoride gas will also quickly destroy the corneas of the eyes.

State v. Todd Mathewson
State v. Process Stainless, Inc.

- Illegal transportation of hazardous waste in violation of Texas Water Code §7.162 (a)(1), 3rd Degree Felony
- Illegal storage of hazardous waste in violation of Texas Water Code §7.162 (a)(2), 3rd Degree Felony
- Illegal Transportation of Hazardous Waste without a Manifest, §7.162(a)(5), 3rd degree

Thank you

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Helen is a shareholder at Graves, Dougherty, Hearon & Moody, P.C., in Austin, where she has developed a business and regulatory litigation practice since returning to Austin in 1998. She has also worked on environmental issues for over two decades, including permitting and remediation, tort litigation over exposure and contamination, professional liability in environmental assessment, response cost liability, water rights, and statutory requirements.

Helen contributes time as a *pro bono* attorney ad litem for children taken into protective custody in family court settings, and serves on the Board of Dripping Springs Helping Hands where she has chaired the Empty Bowl Project for the past four years. She rows port oar on Lady Bird Lake with a masters-level women's eight, is an active fundraiser for KUT, and has a special interest in Texas Hill Country land management (storm water and roads).

EDUCATION

B.A. in English, Wellesley College Scholar (1967), Wellesley College
M.A. in English and Linguistics (1971), The University of Texas at Austin
J.D. *magna cum laude,* Order of the Coif (1983), The University of Michigan Law School

PROFESSIONAL ACTIVITIES

Shareholder, Graves, Dougherty, Hearon & Moody, P.C., 2000-present: business and regulatory litigation
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Member, State Bar of Texas, Litigation Section, Environment and Natural Resources Section
Member, Austin Bar Association, Administrative Law; Environment, Natural Resources & Water; and Oil, Gas & Mineral Sections
Member, American Bar Association, Litigation Section; Section of Environment, Energy and Resources)
Member, Alabama State Bar (President, Environmental Law Section, 1998-1999)

SELECTED LAW-RELATED PUBLICATIONS

Co-Author, "As Is" In a Contaminated World (61 pages), 19th Annual Robert C. Sneed, TEXAS LAND TITLE INSTITUTE, December, 2009, San Antonio, Texas.
Author/Speaker, Complying with Storm Water and Surface Water Management Regulations, Texas Water Laws and Regulations, HalfMoon Seminars, April 30, 2009, Austin, Texas.
Author/Speaker, New Phase I Requirements for Real Estate Transactions: Implications of The New "All Appropriate Inquiries" Rule, State Bar of Texas 28th Annual Advanced Real Estate Law Course, June 29 – July 1, 2006, San Antonio, Texas.
Author/Speaker, Curious Characteristics of Karst: Legal Environmental Considerations, presented at the American Bar Association Section of Environment, Energy and Resources, October 3-7, 2001, Adam's Mark Hotel, St. Louis, Missouri.
Faculty Member and Author/Speaker, Recent Developments - Texas Water Law, The University of Texas School of Law 3rd Annual Conference on Land Use Planning Law, March 4-5, 1999, Austin, Texas.

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B.A. in politics, philosophy and economics with first class honours (1972), M.A. (1989), Oxford University
J.D. with high honors (1975), University of Texas School of Law

PROFESSIONAL ACTIVITIES

Shareholder - Graves, Dougherty, Hearon & Moody, P.C.: business litigation and regulatory litigation in federal and state courts (1996 - present)
Visiting Professor, University of Texas School of Law (Aug. 1992 - Dec. 1995): mainly teaching federal administrative law and Texas administrative law
Partner - Vinson & Elkins (1982-1992): managing partner of the Austin office
Special Assistant Attorney General of Texas (September 1977 – December 1978)
Member, American Law Institute
Member, Texas Supreme Court Advisory Committee

SELECTED LAW-RELATED PUBLICATIONS AND HONORS

Listed in The Best Lawyers in America® published by Woodward/White, Inc., Administrative Law, Appellate Law, Energy Law, Environmental Law, Natural Resources Law, 1999 - 2009
Co-Author, *Pleas to the Jurisdiction in Texas Administrative Law*, 11 TEX. TECH ADMIN. L.J. 71 (2009)
Author, *UDJA Declaratory Judgments in Texas Administrative Law*, 9 TEX. TECH ADMIN. L.J. 195 (2008)
Author, *Texas Administrative Law: Trials, Triumphs, and New Challenges*, 7 TEX. TECH ADMIN. L.J. 287 (2006)

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Member, American Bar Association Administrative Law and Regulatory Practice Section and Public Utility, Communications and Transportation Law Section)

SELECTED LAW-RELATED PUBLICATIONS

Author/Speaker, *Sovereign Immunity and Water Transactions*, State Bar of Texas The Changing Face of Water Rights, 2009
Author/Speaker, *Water and Wastewater to New Developments*, Austin Bar Association 16th Annual Land Development Seminar, 2008
Co-Author, *Tips for Dealing with Local Governments*, State Bar of Texas 29th Annual Advanced Real Estate Law Course, 2007
Author/Speaker, *Enforcing Development Rights in Litigation*, State Bar of Texas 27th Annual Advanced Real Estate Law Course, 2005
Author/Speaker, *Drafting for Surface Water Conveyancing or Purchasing of Water by Contract*, State Bar of Texas The Changing Face of Water Rights in Texas, 2004
Author/Speaker, *Transferring Surface Water Rights*, State Bar of Texas The Changing Face of Water Rights in Texas, 2003
Author, *Lake Brownwood and Texas Water Law*, 45 SW. HIST. QUARTERLY 351, 1992

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University of Notre Dame (B.B.A., Finance and Computer Applications, cum laude 1999)
University of Texas at Austin School of Law (J.D., 2002), Delta Theta Phi legal fraternity. Recipient of the Honorable William Garwood Presidential Scholarship in Law.

PROFESSIONAL ACTIVITIES

State Bar of Texas
Austin Bar Association (Real Estate Section)
Real Estate Council of Austin, Leadership Development Council Steering Committee, Board of Directors (2008)
Texas Monthly Rising Star, Real Estate Law, 2008
Houston Young Lawyers' Leadership Academy, 2004 Graduate
Rev. A. Leonard Collins, CSC Leadership Award, 1999 Recipient
Big Brothers Big Sisters of Central Texas, Board Member

EX PARTE ISSUES IN THE ADMINISTRATIVE SETTING: OPINION NO. 587 AND PROPOSED CHANGES TO RULE 3.05, TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT

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22nd ANNUAL ENVIRONMENTAL SUPERCONFERENCE
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EX PARTE ISSUES IN THE ADMINISTRATIVE SETTING: OPINION NO. 587 AND PROPOSED CHANGES TO RULE 3.05, TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT

I. INTRODUCTION

In response to a question from Texas Legal Services Center, the Professional Ethics Committee of the State Bar of Texas in May 2009 issued Opinion No. 587. Opinion No. 587 states that, under Rule 3.05 of the Texas Disciplinary Rules of Professional Conduct (Rule 3.05),[1] a lawyer may not contact an administrative agency decision maker about a matter the lawyer's client may or may not file before the agency, if it is reasonably foreseeable that the client will file and the matter would be or could become a contested case, because that contact would be an ex parte communication in a "pending matter." An "ex parte" communication is a communication by one party to a matter without notice to the other party or parties. Opinion No. 587[2] states that the matter is "pending" before the agency because "the agency with which the communication occurs is expected to make a decision on the matter."

Opinion No. 587 creates substantial problems for lawyers who deal with administrative agencies. It has long been standard practice for administrative lawyers to meet with agency decision makers before a client files an application that could lead to a contested case proceeding. Lawyers also regularly meet with agency decision makers about legislative (rulemaking) and executive (e.g., enforcement, task force creation) matters that may have direct application to pending and future agency decisions in contested cases involving the lawyer's clients. Opinion No. 587 clearly opines that Rule 3.05 prohibits the first type of meeting and that Rule 3.05 may prohibit the second type as well.

A number of Texas lawyers who practice administrative law submitted a Request for Reconsideration of Opinion No. 587 to the Professional Ethics Committee and the Texas Supreme Court on December 30, 2009. The supporting Brief (Brief) argues that Opinion No. 587 is legally wrong because it expands the definition of "pending matter" beyond the language of Rule 3.05, is contrary to Texas Supreme Court controlling precedent, infringes upon a person's constitutional right to free speech, and treats lawyer and non-lawyer communication differently. The Brief also argues that Opinion No. 587 neglects the current realities of administrative law practice. According to the Brief, "the Opinion creates an undesirable framework for practicing administrative law before Texas agencies because it greatly expands the scope of Rule 3.05 without accounting for the realities of regulatory practice." Brief In Support of Request for Reconsideration of Opinion No. 587 Before The Professional Ethics Committee of the State Bar of Texas at 1-2 (Dec. 30, 2009). The Brief is currently pending before the State Bar Ethics Committee.[3] On May 20, 2010, the Committee responded that the Brief's request for reconsideration, treated as a request to reconsider the conclusions in Opinion No. 587, was denied. However, treated as a request for clarification, it was accepted for further action (but no time frame for action was specified).[4]

This paper discusses pre-Opinion No. 587 law and practice on ex parte communications, Opinion No. 587, the problems that Opinion No. 587 creates for administrative lawyers and their clients, and possible solutions for those problems if the Ethics Committee does not withdraw or

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[1] Existing Rule 3.05 and Comments, the definitions of "tribunal" and "matter" are attached as Exhibit A.
[2] Opinion No. 587 is attached as Exhibit B.
[3] The Brief is attached as Exhibit C.
[4] The Committee's response letter is attached as Exhibit D.

modify Opinion No. 587, including the impact of currently proposed revisions to the Texas Disciplinary Rules of Civil Procedure.

A. Texas Supreme Court's *Vandygriff* decision

In *Vandygriff*, citizens from Borger, Texas met with the Savings and Loan Commissioner after their charter application for a savings and loan in Borger, Texas was denied. The unsuccessful applicants sought "to find out what (they) had done wrong." *See Vandygriff v. First Sav. & Loan Ass'n of Borger*, 617 S.W.2d 669, 670 (Tex. 1981). After the meeting with the Commissioner and after another institution had submitted an application for another savings and loan in Borger, the citizens filed another application for a savings and loan. The application from the Borger citizens was granted and the other institution's application was denied. The second institution filed suit against the Commissioner. *Id.* at 671.

The Texas Administrative Procedure Act (APA) provided, and continues to provide, that "members or employees of an agency assigned to render a decision or to make findings of fact and conclusions of law in a contested case may not communicate, directly or indirectly, in connection with any issue of fact or law with any agency, person, party or their representatives, except on notice and opportunity for all parties to participate." *Id.* citing TEX. REV. CIV. STAT. art. 6252-13a § 17 (now codified at TEX. GOV'T CODE 2001.061). The Texas Supreme Court held the meeting between the Commissioner and the citizens did not violate the APA ex parte prohibition because there was not a "contested case" pending at the time of meeting. *Id.* at 672; *see Hammack v. Public Utility Commission of Texas*, 131 S.W.3d 713, 731 (Tex. App. – Austin 2004, pet. denied) (pre-filing communications between Public Utility Commission and applicant were not impermissible ex parte communications, *citing Vandygriff*). *Hammack* involves a 1999 application and a contested case hearing in 2000, ten years after Rule 3.05 became effective; the opinion does not reference Rule 3.05.

Certain legal scholars have urged that the *Vandygriff* opinion is ambiguous because the opinion considered whether the ex parte meeting had caused substantial harm to the appellant and cited *Lewis v. Guaranty Federal Savings and Loan Association* "approvingly" as part of a discussion on whether the ex parte meeting violated the appellant's due process rights. *See* Ron Beal & Lou Bright, *Ethics Opinion No. 587 and APA Ex Parte Communications*, State Bar of Texas 21st Annual Advanced Administrative Law Course (Sept. 17-18, 2009). There is nothing unclear about *Vandygriff*. The Supreme Court in *Vandygriff* cited *Guaranty Federal* as an example of due process being denied where "the ex parte investigation occurred during pendency of a contested case and the appellants were clearly denied notice and the opportunity to cross-examine and present rebuttal evidence." *Vandygriff*, 617 S.W.2d at 672. The Supreme Court stated that *Vandygriff* is "distinguishable from *Guaranty Federal*" because there "was no contested case pending when the meeting occurred" and the "content of the meeting was voluntarily disclosed at the outset of the hearing." *Id.* In distinguishing *Guaranty Federal*, the Supreme Court confirmed that an ex parte communication is only prohibited when there is a pending case. *Id.*

B. Texas Disciplinary Rule of Professional Conduct No. 3.05

1. Rule 3.05's Prohibitions

Rule 3.05 seeks to maintain the impartiality of the tribunal by, among other things, prohibiting a lawyer from seeking "to influence a tribunal concerning a pending matter by means prohibited by law or applicable rules of practice or procedure." TEX. DISCIPLINARY R. PROF'L

CONDUCT § 3.05(a). It also seeks to maintain the impartiality of the tribunal by prohibiting a lawyer from communicating with a tribunal, except as otherwise permitted by law and not prohibited by applicable rules of practice or procedure. *Id.* 3.05(b).

For purposes of Rule 3.05, "matter" has "the meanings ascribed to it in Rule 1.10(f) of these Rules." *Id.* 3.05(c)(1). A matter is "pending" before a particular tribunal "either when that entity has been selected to determine the matter or when it is reasonably foreseeable that that entity will be so selected." *Id.* 3.05(c)(2).

2. History of Rule 3.05

Rule 3.05 was adopted after the *Vandygriff* decision. Did the Court, in adopting Rule 3.05, intend to overrule its own decision in *Vandygriff* concerning administrative practice subject to the APA? The text of Rule 3.05 and its Comments do not say so. To date no one has called attention to any aspect of the "legislative history" of that process showing an intent to change the Court's holding.

In the fall of 1984, the State Bar of Texas began a review of the American Bar Association's Model Code of Professional Conduct (Model Rules). The State Bar formed a Special Committee to review the rules. The Special Committee created eight subcommittees, one for each of the eight major divisions of the proposed Model Rules. The Special Committee reviewed every rule within the Model Rules and had one-day to two-day monthly meetings beginning in 1985. The proposed final draft of the Texas Disciplinary Rules of Professional Conduct (Texas Rules) was completed in December 1986. The Special Committee proposed the Texas Rules to the Board of Directors of the State Bar of Texas in February 1987. The Board submitted a petition to the Texas Supreme Court requesting referendum on the proposed rules in January 1988. Rule 3.05 was approved in a referendum from May 19 – June 19, 1989 and became effective on January 1, 1990, nine years after the *Vandygriff* decision.

As discussed in more detail below, the Texas Supreme Court is currently proposing revisions to the Texas Rules in response to the revision of the ABA Model Rules, using a different procedure than the one used when the Texas Rules were originally adopted.[5]

C. Opinion No. 587

In May 2009, the Professional Ethics Committee for the State Bar of Texas released Opinion No. 587. Opinion No. 587 concludes that: "In the absence of applicable law that permits ex parte communications in a particular matter, Rule 3.05 of the Texas Disciplinary Rules of Professional Conduct imposes strict limits on ex parte communications with an agency's decision maker prior to the filing of a matter with an agency that is expected to act concerning the matter in a dispute resolution, licensing, or adjudicatory capacity, if a purpose of the ex parte communication is to influence the agency's decision in the matter." Opinion No. 587 at 5. The Opinion states that Rule 3.05 does not prohibit ex parte communications with agency employees who are not decision makers, except where "such communications are intended to be indirect ex parte communications with the decision maker for purposes of influencing the outcome of the matter." *Id.* In reaching this conclusion, the Opinion examines the meaning of "matter," "pending," and "tribunal" in the administrative agency context.

[5] The Texas Supreme Court is revising the rules under TEX. GOV'T CODE § 81.024, which states that "The Supreme Court shall promulgate the rules governing the state bar."

1. Meaning of "matter"

Opinion No. 587 looks to Rule 1.10(f) to determine the meaning of "matter." The Opinion states that, under Rule 1.10(f) "the term 'matter' does not include regulation-making or the rule-making proceedings or assignments." But "matter" does include any "adjudicatory proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge accusation, arrest, or other similar, particular transaction involving a specific party or parties." *Id.* at 2.

The Opinion acknowledges that agencies are "legal hybrids that may have judicial, legislative, executive and ministerial functions," and states that Rule 3.05 only applies to these agencies when they are functioning as "tribunals" in their dispute-resolution, licensing or adjudicatory capacity and "not when such agencies are functioning in a legislative, executive or ministerial capacity." *Id.* at 3.

2. Meaning of "pending"

Opinion No. 587 states that "a matter is 'pending' before an administrative agency when the future adjudicatory proceedings in the agency are reasonably foreseeable." *Id.* at 2. The Opinion states that the matter is "pending" before the agency if "the agency with which the communication occurs is expected to make a decision on the matter." *Id.*

3. Meaning of "tribunal"

The Texas Rules defines "tribunal" as "any governmental body or any other person engaged in a process of resolving a particular dispute or controversy." *Id.* at 3. In particular, the Rules recognize that an administrative agency is a tribunal "when engaging in adjudicatory or licensing activities as defined by applicable law or rules of practice or procedure," but does not include "governmental bodies when acting in a legislative or rule-making capacity." *Id.*

The Opinion acknowledges that agencies are "legal hybrids that may have judicial, legislative, executive and ministerial functions," and states that Rule 3.05 only applies to these agencies when they are functioning as "tribunals" in their dispute-resolution, licensing or adjudicatory capacity and "not when such agencies are functioning in a legislative, executive or ministerial capacity." *Id.*

The Opinion also concludes that, in the agency context, "tribunal" only includes the judge or agency decision maker or decision-making body. "In the case of an administrative agency, the decision maker could be an administrative law judge, a hearing officer, the executive in charge of the agency, or a board or other governing body of the agency." *Id.*

The Opinion concludes that "Tribunal" does not include the members, employees or representatives of the agency who are not the decision-maker or a member of the decision making body with respect to the matter, with one caveat: Rule 3.05 would apply "if such a communication was intended by the lawyer as an indirect communication, though non-decision-making personnel, with the decision maker for purpose of influencing the outcome of the agency's decision in the matter." *Id.* and at 5.

Further, the Opinion concludes that although the definition of "tribunal" does not necessarily preclude ex parte communications with every agency employee in a matter that is or may become a contested case, it does prohibit agency employees who take an "advocacy position" in a contested case from communicating ex parte with agency employees who are decision makers. *Id.* at 4.

II. PRACTICAL PROBLEMS CREATED BY OPINION 587

Relying on *Vandygriff*, administrative agencies and regulated entities and their counsel have assumed that attorneys could meet with administrative agency representatives when there is no contested case pending before them without violating ex parte prohibitions. As in *Vandygriff*, this had practical benefits for the commissioner and for the concerned citizens because the commissioner could have specific questions addressed in a subsequent proceeding and the concerned citizens could "determine what they may have done wrong." Under Opinion No. 587, whether a communication with administrative agencies violates a rule of disciplinary conduct and exposes the attorney to disciplinary action in any particular case is "up in the air." There are general practical problems with the Opinion, and there are problems specific to particular agencies.

A. General problems

1. Contacts before filing a possible contested case

The Brief states that administrative lawyers often contact agency decision makers on potential contested case matters to determine whether or not to file the case and when – e.g., in light of considerations such as viability of the potential case and its relation to other existing or potential contested cases that may raise similar topics. Brief, at 13-14. Such a meeting occurred in *Vandygriff*, where the purpose of the meeting specifically included making sure that on reapplication the applicant knew what it would have to do to address the agency's concerns. *Vandygriff*, at 671.Opinion No. 587 opines that Rule 3.05 prohibits these contacts if it is "reasonably foreseeable" that the case may be filed.

2. Contacts regarding rulemakings, task forces, etc.

Administrative lawyers often contact agency decision makers on pending rulemakings, and/or executive proceedings (studies, contract, request for proposals, and development). Those contacts are not subject to ex parte prohibitions, though they may be regulated in other ways. However, there may be some overlap in the substance of a rulemaking and the possible "matters" that the lawyer's client, or another entity, or the agency might file under the rules. For example, the adoption of Texas Commission on Environmental Quality (TCEQ) rules governing notice requirements for water rights applications may have a direct impact on a client's contemplated application for an amended water right. How can the administrative lawyer conduct the permitted contact about rulemaking or legislative action without the risk of violating Opinion 587 in this situation?

3. One rule for lawyers, another for clients?

Only lawyers, acting directly or through clients acting at their direction, are subject to Rule 3.05. So non-lawyer clients acting without legal counsel may (subject to other applicable law) meet with agency heads and have conversations that would, for their attorneys, be prohibited ex parte contacts under the conclusions of Opinion No. 587. *See* Brief at 8, 11, 14, 17, on the frequency of non-lawyer contacts with agency decision makers. Non-lawyer clients acting without the presence or direction of counsel may be less likely to understand where the lines between proper and improper communication are, have less incentive to respect the lines,

or less understanding of the potential risks[6] they face. For example, *see Lewis v. Guaranty Federal Savings and Loan Ass'n*, 483 S.W.2d 837 (Tex. Civ. App. – Austin 1972, writ ref'd n.r.e.) (affirming trial court's order voiding Savings and Loan Commissioner's award of applicant's charter because of ex parte contact between applicant and Commissioner during pendency of contested case). As will be discussed later, Opinion No. 587 could also prevent agency decision makers from obtaining information they need.

4. Effects on the agency's own legal staff

As discussed earlier, Opinion No. 587 opines that Rule 3.05 prohibits ex parte communications between agency decision makers and their own staff if the agency staff would or could be a party to any contested case on an application. This prohibition applies to the agency's own staff lawyers who may take an "advocacy position" in a potential contested case. Agency heads frequently need agency counsel to provide advice on matters that are really pending or are merely possible future contested cases, including those instituted by agency and rulemakings, task forces, requests for proposals, and notices of violations or referrals to attorney general. All agencies may need to do as some agencies, including the Texas Commission on Environmental Quality (TCEQ), have done, and have one legal staff that takes "advocacy positions" and a second legal staff that only advises the Commissioners. And this action would not solve all the problems that Opinion No. 587 presents for agency staff and others. For example, would Opinion No. 587 prevent any ex parte communications between the TCEQ "advocacy" legal staff and the Commissioner's legal staff because such contacts could be "indirect" ex parte communication with decision makers?

5. The usual solution for ex parte won't work

As a practical matter, some communication needs to occur between a party and a decision-maker. The usual solution for ex parte communications is simple – allow the communication to occur, but only with notice and opportunity to the adverse parties to attend and be heard.

This solution is expressly provided for in Rule 3.05. To maintain the impartiality of the tribunal, Rule 3.05 prohibits communicating ex parte with a tribunal for the purpose of influencing that person or entity concerning a pending matter except as otherwise permitted by law and not prohibited by applicable rule of practice or procedure other than: (1) in the course of official proceedings in the cause; (2) in writing if the lawyer promptly delivers a copy of the writing to opposing counsel or the adverse party if [the adverse party] is not represented by a lawyer; or (3) orally upon adequate notice to opposing counsel or to the adverse party if [the

[6] Risks posed by application of the interpretation of Rule 3.05 contained in Opinion No. 587 are not limited to possible disciplinary actions against lawyers. They include risks that a contested case decision may be overturned and the case remanded for new proceedings. The Texas Supreme Court in *Acker v. Texas Water Commission*, 790 S.W.2d 299 (Tex. 1990), remanded to the trial court for further proceedings after an applicant appealed the denial of his wastewater permit claiming an alleged open meetings violation (discussion between two of three commissioners in the men's room). The trial court granted summary judgment for the applicant; the court of appeals reversed; but the Supreme Court held the Commissioners' affidavits had created a fact issue precluding summary judgment that required further trial court proceedings to determine whether to set aside the Commission's order of denial. *Id.* at 302. The Third Court of Appeals in *Hammack v. Public Utility Commission of Texas*, 131 S.W.3d 713 (Tex. App. – Austin 2004, pet. denied), used the same analytical approach to an allegation of a violation of the APA ex parte prohibition, though it concluded on the facts of that case (and applying *Vandygriff*) that those appealing the PUC's decision had not created a due process fact issue. *Id.* at 730-32.

adverse party] is not represented by a lawyer. TEX. DISCIPLINARY R. PROF'L CONDUCT § 3.05(b). Therefore, if some type of communication is not prohibited by a rule, or expressly permitted by another area, the lawyer can conduct it as long as sufficient notice is provided to the other party.

This "give notice to the opposing party" solution will not work for many of the problems Opinion No. 587 creates. In many administrative agency contexts, the entity that represents "one side," e.g., that is thinking about filing what might be a contested case, does not know even whether it will be contested – much less by which specific other potential parties.

B. Agency-specific examples

Opinion No. 587 reportedly has had significant effects on practice at some agencies. For example, Commissioners of the Public Utility Commission now reportedly refuse to meet with attorneys because of Opinion 587. *See* Brief at 20. This papers examines issues that may arise at two agencies charged with the regulation of water in Texas – the TCEQ and the Texas Water Development Board (TWDB).

1. TCEQ-specific problems

The TCEQ has a heavy permitting and enforcement workload. TCEQ has delegated the final decision-making authority in many permitting, licensing, and enforcement proceedings to its Executive Director when the proceedings are uncontested or when the law does not provide an opportunity for a hearing. These decision are made without a hearing and without the participation of the TCEQ Commissioners. *See* 30 TEX. ADMIN. CODE §§ 50.131, 50.133.

Many administrative lawyers who practice before the TCEQ have regularly communicated with the TCEQ Executive Director and his staff, including his legal staff, on matters that may or may not turn out to be uncontested. Generally, neither the Executive Director, his staff, or the administrative lawyer representing a client know whether the matter will be contested until after notice of the proceeding has been published and interested persons have been given an opportunity to comment or request a contested case hearing. In some cases, the Executive Director's staff may have completed its technical review of an application or prepared a recommended draft permit before determining whether the application is contested. *See, e.g., id.* § 291.151(a) (providing for public notice of water rights applications after technical review); §§ 39.151(c), 55.201 (providing for public notice of draft water quality permits).

Does Rule 3.05, as construed in Opinion No. 587, prohibit a lawyer from communicating with the Executive Director until it is known whether the matter is contested? Could Rule 3.05, as construed in Opinion No. 587, preclude a lawyer from communicating with the Executive Director's legal staff or other staff before it is known whether the matter is contested because such contacts may be an "indirect communication" with the Executive Director? Could Rule 3.05, as construed in Opinion No. 587, restrict a lawyer from communicating with the Executive Director even after it is determined that the matter is uncontested? Rule 1.10(f) defines "matter" to include any "adjudicatory proceeding, application, request for a ruling or other determination." *See* Brief at 16.

Reportedly, the TCEQ is taking a nuanced approach to Opinion No. 587. It is reported that the Commissioners are not making distinctions based on lawyers versus non-lawyers. Rather, the Commissioners are taking a conservative view of what could possibly become a contested case and determining their meetings on the basis of the contested case. TCEQ Commissioners will not meet with any person (attorneys, engineers, geologists, or lay people) if there is any chance that the matter under discussion will become a "contested case." It is unlikely that the Commissioners will issue a formal opinion or procedure guide on Opinion 587;

determinations are being made on a case-by-case basis. Currently, the Executive Director is reviewing Opinion 587 and his meeting protocol. The TCEQ's approach on Opinion 587 may change, but its current practice highlights the kind of problems the Opinion creates.

While Opinion No. 587 focuses on a fact pattern where a "lawyer plans to file a matter," could it have broader application? Rule 3.05 is not limited to matters filed by a lawyer, but covers "a pending matter." Opinion No. 587 opines that Rule 3.05 extends "pending" to "when future adjudicatory proceedings in the agency are reasonably foreseeable." The extent of "reasonably foreseeable" proceedings suggests myriad scenarios as problematic under the Opinion.

For example, assume a lawyer contacts TCEQ air personnel about whether or not certain repairs to a new type of equipment would require an air permit or whether the repairs could fall within a permit-by-rule exception. Following the contact, personnel agree no permit is required, and the lawyer so confirms in a letter to the agency. Was the prior communication an impermissible ex parte contact under Rule 3.05 as construed by Opinion No. 587? Did the lawyer *intend* the conversation as an indirect communication "through non-decision-making personnel, with the decision-maker for the purpose of influencing the outcome of the agency's decision in the matter"?

Assume a lawyer for an environmental non-profit organization contacts TCEQ with a question about the application of Concentrated Animal Feeding Operations regulations, in order to determine whether or not a violation may exist, in order to decide whether or not to file a complaint for low-income residents adjacent to a feedlot. Is a future proceeding "reasonably foreseeable"? Is the communication impermissible under Rule 3.05 as construed by Opinion No. 587?

Assume a lawyer contacts TCEQ concerning the extent of documentation required to resolve an enforcement order against the client arising from a routine inspection involving sizing of a sedimentation basin under TCEQ's Edwards Aquifer rules. Assume no neighbor complained. The enforcement matter is pending (though filed by the agency) and may or may not be contested. Is the communication impermissible under Rule 3.05 as construed by Opinion No. 587?

2. TWDB-specific problems

As reported in a front-page newspaper story, there are 98 groundwater conservation districts in Texas, with a wide variety of situations:

> Suppliers of groundwater "face a problem because groundwater districts, set up as individual fiefdoms meant to reflect local histories and philosophies about water and land use, have different permitting rules and sensibilities."

See AUSTIN AMERICAN-STATESMAN, *State Seeks to Unify Local Handling of Groundwater* (Feb, 28, 2010). The State, under the Legislature's statutory direction, is confronting a host of regulatory issues about how to bring some greater statewide coherence to groundwater regulation.

How will Rule 3.05 as construed in Opinion No. 587 affect the regulatory process for creating greater coherence? For example, the Texas Water Code requires all groundwater conservation districts in designated groundwater management areas (GMAs) to establish "desired future conditions" (DFCs) for the relevant aquifers within the management areas. *See*

TEX. WATER CODE § 36.108(d). "A person with a legally defined interested in the groundwater in the groundwater management area, a district in or adjacent to the groundwater management area, or a regional water planning group for a groundwater management area may file a petition with the development board appealing the approval of desired future conditions." *Id.* § 36.108(l). TWDB must review the petition and any evidence relevant to the petition and hold at least one hearing to take testimony on the issues. TWDB may delegate responsibility for the hearing to the executive administrator or a person designated by the executive administrator. If TWDB finds that the DFCs should be revised, it shall submit a report to the districts with its finding and recommendations on revisions to the DFCs. *See id.* § 36.108(m). In January 2010, TWDB found that the DFCs adopted by GMA-9 were unreasonable because they were not achievable and recommended specific revisions.

See http://www.twdb.state.tx.us/publications/press_releases.

The proceeding described in Section 36.108 appears to fall within Opinion No. 587's interpretation of a "matter" decided by a "tribunal." Under Rule 3.05 as construed by the Opinion, would lawyers who represent – or serve on the boards of – groundwater conservation districts be prevented from discussing the specific DFC fact issues, legal issues, and policy issues for their GMA with the six Board members because the district could challenge or defend the adopted DFCs in some future contested case? Would it only prohibit ex parte communications with Board members after the appeal is filed? Would it prohibit ex parte communications with TWDB staff members who advise the Board on DFCs because they might constitute "indirect" ex parte communications with Board members for the purpose of influencing the TWDB's decisions?

III. OPINION NO. 587 IS WRONG ON THE LAW

A. Opinion No. 587 conflicts with Rule 3.05's words and purpose

Opinion No. 587 is simply wrong in asserting that a "pending matter," for purposes of Rule 3.05 and 1.10(f) by reference, includes a possible future administrative proceeding that, once filed, or once filed and if protested, would be a contested case under the APA or the agency's organic statute.

1. "Specific parties" requirement

A "pending matter" must, logically, be a "matter." Rule 3.05, rightly understood, is a restriction on ex parte contacts that ensures contacts with the tribunal in a "pending matter" can be made only with notice to the opposing party. *See* TEX. DISCIPLINARY R. PROF'L CONDUCT 3.05. Rule 3.05 therefore defines (by reference to 1.10(f)) a "matter" that may or may not be pending as "any adjudicatory proceeding... involving a specific party or parties." *Id.* 1.10(f).

One must not bog down in the full laundry list in Rule 1.10(f) of potential matters that, in the courthouse, would be adjudicative: "any adjudicatory proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge, accusation [sic], arrest or other similar particular transaction involving a specific party or parties." *Id.* The key words are "involving a specific party or parties."

With a potential courthouse lawsuit, no matter what the cause of action or level of the court system, from JP or small claims court to the original jurisdiction of the United States Supreme Court, any matter involves at least one specific prospective party on one side, and at least one specific adverse party, on the other —the plaintiff, and at least one defendant.

In contrast, a possible contested case may have no specific known adverse parties, and the entity that might make the filing may itself not thereby become a specific party in the adversarial sense.

It is not enough to quote, as Opinion 587 does, the part of Rule 3.05 saying that a "matter" becomes "pending" when an agency "has been selected to determine the matter or when it is reasonably foreseeable that the tribunal will be so selected." *Id.* 3.05(c)(2). In the court context, when a lawyer is considering filing suit, the only question under Rule 3.05 is whether it is "reasonably foreseeable" that this specific judge will be "selected" as the tribunal. In contrast, for administrative law, the tribunal in the sense of the agency is known but whether there will be any adjudicatory proceeding at all is unknown.

In a litigation context, there are a plaintiff and a defendant before the court. In administrative contexts, a "matter" in the contested case sense cannot be "pending" until it is filed and is known to involve "specific parties." Until then, administrative lawyer contacts regarding possible future filings that would or could be contested cases are not "prohibited by law" under Rule 3.05(a) and are "otherwise permitted by law" under Rule 3.05(b) because the Texas Supreme Court says the APA does not treat a future possible contested case as a "pending" contested case.

2. Other ex parte prohibitions

This interpretation of matter does *not*, of course, mean that "anything goes" unless and until a potential contested case has been filed and has become a contested case. There are many statutes, rules and doctrines other than the ex parte contact rule that regulate communications with decision-makers. For example, the Texas Penal Code prohibits any person from exerting improper influence over public officials presiding over adjudicatory proceedings, regardless of whether he or she is a lawyer. TEX. PENAL CODE § 36.04.

The TCEQ has a specific rule governing ex parte communication. *See* 30 TEX. ADMIN. CODE § 80.15. Current TCEQ regulations already control ex parte communication with any commissioner or the judge by all parties and their representatives (not just lawyers). This restriction applies during the pendency of a contested case, under 30 TAC § 80.15, and provides specific direction as to the prohibition, the context, and those covered by the prohibition:

> (a) No ex parte communications. Unless required for the disposition of an ex parte matter authorized by law, during the pendency of a contested case either at SOAH or before the commission, no party, person, or their representatives shall communicate directly or indirectly with any commissioner or the judge concerning any issue of fact or law relative to the pending case, except on notice and opportunity for all parties to participate.

TCEQ's 30 TAC § 80.15(b) also addresses management of requests from the commissioner or judge for technical help from a TCEQ staff member. For purposes of the contested case, the judge issues an order copied to all parties asking for a staff member to be designated. All communications between the staff expert and the judge are recorded or in writing and if submitted to or considered by the judge, become public records. Furthermore, during the pendency of the case, no party or party representative may communicate directly or indirectly with the designated staff expert "except on notice and opportunity for all parties to participate." 30 TAC § 80.15(b).

B. Opinion No. 587 reads Rule 3.05 in conflict with *Vandygriff*'s reading of the APA

Rule 3.05(a) defines an ex parte communication as one that is "prohibited by law." The Supreme Court in *Vandygriff* held that communications between a potential applicant in a possible contested case not yet filed and the agency head are "not prohibited." *Vandygriff*, 617 S.W.2d at 672; *see also* Brief at 7.

The Committee notes that Rule 3.05(b) says "except as permitted by law and not prohibited by applicable rules of practice and procedure." The Committee then argues that for purposes of Rule 3.05(b), the Texas Supreme Court's opinion in *Vandygriff* did not "affirmatively permit[]" communications between a potential applicant in a possible contested case not yet filed and the agency head, when the Supreme Court held that such communications are not prohibited by the APA. *See* Opinion No. 587 at 2. Indeed, the Committee simply ignores *Vandygriff* in stating that "if there are no other applicable laws or rules of practice or procedure that prohibit or specifically permit ex parte communications with respect to the matter coming before the agency," Rule 3.05 imposes strict limits "in the factual situation here considered." The Committee then argues that for purposes of Rule 3.05(b), "there is no generally applicable law in Texas that permits the lawyer in these circumstances to communicate with the agency's decision maker, before a matter is filed, for the purpose of influencing the outcome except in the limited ways set forth in Rule 3.05(b)," and that this result applies even if the same communication would not violate the Texas Administrative Procedure Act. *Id.*

The Committee's approach violates common sense and its expression in canons of construction. First, the Committee's argument that communications between a potential applicant in a possible contested case not yet filed and the agency head are "prohibited," even though *Vandygriff* says they are "not prohibited," leaves nothing left of *Vandygriff*. Nothing in the text of Rule 3.05 or its interpretive comments suggests that in adopting Rule 3.05 the Court intended to overrule its holding in *Vandygriff* concerning agency practice pursuant to the APA. *Vandygriff* is binding on the Ethics Committee, just as it is binding on the lower courts, unless and until overturned by the Texas Supreme Court. Second, as to the Opinion's argument that "there is no generally applicable law in Texas that permits the lawyer in these circumstances to communicate with the agency's decision maker," the Opinion ignores that there is a more specific law, i.e., the APA. The Legislature has already specifically addressed the parameters of prohibited ex parte contacts under the APA. Absent an express provision in Rule 3.05 or a strong showing in some equivalent to its "legislative history," a basic rule of statutory construction should apply, i.e., that the *specific* controls over the *general*. *Horizon/CMS Healthcare Corp. v. Auld*, 34 S.W.3d 887, 901 (Tex. 2000) (*citing* the "traditional statutory construction principle that the more specific statute controls over the more general).

Third, the natural reading of the Rule 3.05 language relied on by the Committee in light of *Vandygriff* is that (1) as applied in the administrative law context, ex parte contacts are prohibited by the APA, but (2) in the administrative law context, ex parte contacts do not include communications between a potential applicant in a possible contested case not yet filed and the agency head, (3) unless and except to the extent such contacts are prohibited by the specific agency's organic statute or rules of practice and procedure.

This reading is the logical analogue to a comment to Rule 3.05 that even those ex parte contacts that are normally otherwise prohibited can be permitted: "there are certain types of adjudicatory proceedings, however, which have permitted pending issues to be discussed ex

parte with a tribunal. Certain classes of zoning questions, for example, are frequently handled in that way." TEX. DISCIPLINARY R. PROF'L CONDUCT 3.05, Comment 4.

C. *Vandygriff*'s reading of the APA makes sense

In the court context, the court *only* functions as a "tribunal" – it only sits to adjudicate disputes that qualify as a "matter" – an adjudicatory proceeding. In the administrative law context, the "tribunal" for contested cases may not wind up functioning as an adjudicative "tribunal" at all. The agency is also the legislature, prosecutor, and other executive.

With exceptions for which statutes and other rules provide specific special processes, any court *only* sits to adjudicate matters in the sense of disputes between specific parties. In the administrative law context, even if the agency may wind up being a "tribunal," there may be no (non-agency staff) opposing parties. The presence of other parties may not be known at the beginning of a proceeding or discussions with administrative agencies.

Most fundamentally, a court is *only* supposed to consider public policy when the legal rights and duties of the parties are not otherwise clear (e.g, in evolution of the common law, or the application of the irreparable injury doctrine). In the words of recent judicial confirmation hearings, a judge's job is to call the balls and strikes, to apply the law, not legislate from the bench. In the administrative law context, public policy is always the agency's primary responsibility. Except to the extent the relevant statutes provide otherwise, the agency is expected to make public policy decisions binding in law – even in contested cases.

As a result, the *Vandygriff* decision makes perfectly good sense – it recognizes the importance to sound public policymaking of information conveyed in communications between a potential applicant in a possible contested case not yet filed and the agency head, and reserves the ex parte prohibition for the one situation that clearly does come within Rule 3.05 – a case that has become a contested case with at least one known "specific party" adverse to the application.

IV. OPTIONS FOR LAWYERS AND THEIR CLIENTS?

A. "Clarification" by the Ethics Committee

A number of Texas lawyers who practice administrative law submitted a Request for Reconsideration and accompanying brief on December 30, 2009 to the State Bar's Professional Ethics Committee. On May 20, 2010, the Committee responded that the request, treated as a request to reconsider the conclusions reached in Opinion No. 587, has been denied, but that the request, treated as a request for an opinion clarifying certain issues relating to Opinion No. 587, has been accepted for further action. However, the Committee did not specify a time frame for further action and there is not any established deadline (it is believed that this Request for Reconsideration is the first one received by the Ethics Committee).

B. Legislative action in 2011

If the Committee has not clarified its opinion by the 2011 session, a statutory solution is possible, in theory. The problem is one of "optics." Lawyers do not meet with judges before filing lawsuits. Legislators would have to explain to lay people including a potentially hostile media why and how agencies and potential contested cases are different or accept criticism from those who do not understand (and may not want to understand) the differences. This may be more than legislators are willing or able to do.

One way to test the feasibility of this approach to a solution is to ask which state representatives and state senators will sponsor it, and who would serve as the witnesses in favor.

C. Rulemaking action – agency-by-agency

Most agencies probably have the practice and procedure rulemaking power to make, and define the scope of, an exception to Rule 3.05 to their agency. *See, e.g.*, TCEQ's ex parte provision, 30 TAC § 80.15, *cited* at 10. But for the same "optics" reasons, agencies may be as reluctant as the legislature, or even more reluctant, to make – or amend – such rules.

D. Attorney General Opinion

The Attorney General has refused to give opinions in answer to questions about the Texas Disciplinary Rules of Professional Conduct, stating that such issues are to be determined, "in the first instance, by the attorney and the disciplinary arm of the Supreme Court of Texas and the State Bar of Texas." Op. Tex. Att'y Gen. No. GA-00557 (2007). Additionally, the Attorney General states that "questions about the violations of the rules of professional conduct cannot be answered in an attorney general opinion because they involve considerations of fact. *Id.*

E. Changes to Rules 3.05 and 1.10(f)

Though found in an Appendix to the Government Code, the Texas Disciplinary Rules of Professional Conduct are not enacted by the Legislature. The Texas Disciplinary Rules are adopted by the Supreme Court of Texas in the exercise of its constitutional powers over the judicial department of government.

There are different processes to revise the Texas Disciplinary Rules of Professional Conduct. As discussed above, the initial rules were drafted by practitioners and law professors before delivery to the Supreme Court. Currently, the Texas Rules are being revised because the Ethics 2000 Commission of the American Bar Association revised its Model Rules.

Opinion No. 587 was released while the State Bar was in the process of revising the Texas Rules. On October 20, 2009, the Supreme Court of Texas issued initially proposed amendments to the Texas Rules. Tex. Supreme Court Misc. Order No. 09-9175; *see also* http://www.supreme.courts.state.tx.us/advisories/overview_102909.htm. The Order describes part of the process. The Court appointed the Task Force on the Texas Disciplinary Rules of Professional Conduct, asking the Task Force to report to the Court on any changes the Task Force deemed appropriate. The State Bar of Texas Committee on the Texas Disciplinary Rules of Professional Conduct analyzed the Task Force's recommendations and submitted a series of reports to the Court, State Bar of Texas President, and Task Force. The Court asked the Task Force and State Bar Committee to comment on each other's recommendations and, due to the extent of differences between their recommendations, requested formation of a Conference Committee, which submitted final recommendations to the Court. Following public comment, the amendments (with modifications made after public comment) will be submitted to the State Bar of Texas Board of Directors for approval and consideration for a referendum to the membership of the State Bar. In addition, after the Court finalizes the interpretive comments for the amended Texas Rules, the interpretive comments will be posted for review and sent to the State Bar of Texas Board of Directors for approval and consideration for a referendum to the membership of the State Bar. *See* Order, Misc. Dkt. No. 9-9175. The Board of Directors will determine if it wants the changes voted on by referendum. If it does, the changes are published in the Texas Bar Journal, and, lawyers vote on the revisions. If the changes pass by a majority of the lawyer voters, they are sent to the Supreme Court which then adopts the rules. By statute, the State Bar of Texas operates under a delegation of legislative authority "in aid of the judicial

department's powers under the constitution to regulate the practice of law, and not to the exclusion of those powers." TEX. GOV'T CODE § 81.011.

The October 20, 2009 proposed amendments included changes to Rule 3.05, deleting subsection (c) and thereby deleting the definition of "matter" by reference to Rule 1.10(f), and deleting altogether the definition of "pending" (including that it is "reasonably foreseeable" that the matter will be assigned to "that entity"). The revision substituted "tribunal" for "that entity or person" in Rule 3.05(b), thereby clarifying the prohibited intent as "the purpose of influencing the tribunal." The revision also amended the definition of "tribunal," in Rule 1.00.

Rule 3.05 as currently proposed reads as follows:

> A lawyer shall not:
> (a) seek to influence a tribunal concerning a pending matter by means prohibited by law or applicable rules of practice or procedure;
> (b) except as otherwise permitted by law and not prohibited by applicable rules of practice or procedure, communicate or cause another to communicate ex parte with a tribunal for the purpose of influencing the tribunal concerning a pending matter other than:
> (1) in the course of official proceedings in the cause;
> (2) in writing if the lawyer promptly delivers a copy of the writing to opposing counsel or the adverse party if the adverse party is not represented by a lawyer; or
> (3) orally upon adequate notice to opposing counsel or to the adverse party if the adverse party is not represented by counsel.

On April 14, 2010, the Court issued revised proposed amendments to the Texas Rules. *See* http://www.supreme.courts.state.tx.us/rules/rules.asp. No further amendment was proposed for Rule 3.05, but the definition of "tribunal" in Rule 1.00, Terminology, was further modified to read as follows:

> "Tribunal" denotes a court, an arbitrator in a binding arbitration proceeding, or a legislative body, an administrative agency, or another body acting in an adjudicative capacity. A legislative body, an administrative agency or another body acts in an adjudicative capacity when, after the presentation of evidence or legal argument by a party or parties, one or more neutral officials will render a proposal for decision or a binding legal order or decision directly affecting a party's or parties' interests in a particular matter.

In his transmittal of the revised proposed amendments in April 2010, Chief Justice Jefferson requested that the State Bar Board of Directors consider the proposed amendments and provide the court with any recommendations or comments by October 6, 2010.

On July 7, 2010, the Supreme Court issued the "Revised Version of Proposed Amendments and Comments." No changes were made to the proposed Rules. *See* http://www.supreme.courts.state.tx.us/rules/rules.asp. The changes to the Comments to Rule 3.05 appear primarily to update the dated language on alternative dispute resolution. *Id.*[7]

[7] The currently proposed amendments and comments for Rule 3.05, and the definition of "tribunal" in Rule 1.00, are attached as Exhibit E.

The State Bar currently plans to hold 9 public hearings, tentatively set for August 30-September 10, around the state (Corpus Christi, El Paso, Lubbock, Dallas, San Antonio, Austin, Houston, Tyler, and McAllen), on the proposed amendments.[8] It is possible the State Bar Board may recommend additional changes in its response to the Court, due October 6.

Depending on the decisions from the Board of Directors, the proposed revised Rules and also the interpretive Comments will each then be sent to the members of the State Bar for approval by referendum. *See* Tex. Supreme Court Misc. Order No. 09-9175.

Reportedly the Court's target for any referendum would be a thirty-day period from mid-November to mid-December.

The Supreme Court received public comment on the revisions to the Texas Rules through December 31, 2009. *See* Tex. Supreme Court Misc. Order No. 09-9175. Some public comments recommended adoption of the proposed revisions to Rule 3.05 and the definition of "tribunal" on the ground that they would moot Opinion No. 587. This certainly seems to be the intent and the result of the revised language. But the proposed text does not squarely address the issues created by Opinion No. 587, and the proposed interpretive comments (see above) do not say this is the intent. At least one negative comment on the proposed change to Rule 3.05, from Professor Ron Beal, was not received until after the public comment period.[9]

F. Declaratory judgment action

Assuming one or more plaintiffs with standing could be found who were willing to identify themselves as such, a declaratory judgment action challenging the Opinion No. 587 interpretation of Rule 3.05 and its validity in light of the APA as construed in *Vandygriff* could be filed.

If such a suit were filed, it would enable the Texas Supreme Court to resolve any conflict with *Vandygriff* and to take the responsibility for explaining again that a potential contested case is not a pending matter under the APA. The Court is certainly the least political of the potential decision makers, and the one best qualified to explain how agencies differ from courts and how potential contested cases differ from potential courthouse lawsuits, and why the differences matter.

G. Have the contacts and risk disciplinary action

In agencies that remain willing to follow *Vandygriff*, the final option is to go ahead and have the discussions that *Vandygriff* says are "not prohibited." While the disciplinary process is outside the scope of this paper, it is helpful to be familiar with the general scope of disciplinary procedure.

The disciplinary process starts with the unauthorized meeting between a lawyer and an agency representative. Under the Texas Rules of Disciplinary Procedure, the attorney that conducts the meeting will not be punished unless someone files a grievance. After the meeting occurs, and someone is concerned about the meeting, the concerned individual would file a grievance with the State Bar of Texas. The State Bar of Texas is geographically divided into disciplinary districts that are coextensive with the districts of elected Directors of the State Bar. TEX. R. DISCIPLINARY P. 2.01. Each elected Director of the State Bar shall nominate, and the President of the State Bar shall appoint, the members of Committees within the District. *Id.* 2.02. The Committees acts through panels to conduct disposition dockets and evidentiary

[8] The draft schedule as of July 14, 2010, is attached as Exhibit F.

[9] Prof. Beal's recent editorial from the *Star-Telegram* is attached as Exhibit G.

hearings. *Id.* 2.07. Notice is then provided to the parties involved. The Chief Disciplinary Counsel (as defined in the Texas Rules of Disciplinary Procedure) then conducts an investigation to determine if the written communication is an Inquiry or a Complaint.[10] If it is determined to be an Inquiry, the matter is dismissed and the parties are notified.[11] If the Grievance is a Complaint, the Respondent has the opportunity to respond to the Complaint. The Chief Disciplinary counsel then investigates the complaint for Just Cause. After this investigation, there are investigative hearings and possible imposition of sanctions.[12] *See* TEX. R. DISCIPLINARY P. 2.17, 2.18.The sanctions depend on the nature and degree of Professional Misconduct, seriousness of the circumstances, damage to profession. The sanctions could be suspension of law license, restitution to those affected, or initiating a district court proceeding.

One may assume that, when the lawyer has met with an agency head who shares the lawyer's view that Opinion 587 is wrong, the ultimate risk of being sanctioned by the disciplinary system may be small. For reasons of professional reputation as well as the client and its lawyers' mutual interest in succeeding on the merits of the agency proceeding (whether or not it becomes a contested case), however, running any such risk is unattractive. But unless and until there is another solution, the decision whether to run it is one each lawyer representing (or serving in a non-lawyer capacity with) a regulated entity must face.

The lawyer may be tempted to advise the client that, while the lawyer is prohibited under Opinion 587 from certain communications, the client itself (assuming we are speaking of a member of management who does not herself have an active law license) is not subject to this specific prohibition.

The problems are that, for this distinction to matter, the lawyer and his client have to avoid "an indirect communication with an agency decision-maker that violates" the Texas Disciplinary Rules of Professional Conduct. *See* Brief at 18.

V. CONCLUSION

Opinion No. 587 presents a view that Rule 3.05 overrules *Vandygriff*'s interpretation of the administrative law-specific APA. That is probably incorrect as a matter of law and certainly poses a number of practical problems for lawyers representing client before administrative agencies and for administrative agency lawyers. Future revisions to the Texas Rules may eventually solve this problem, but, in the meantime, all lawyers who deal with administrative agencies should consider the risk of a grievance or other action against them and the risk to their clients of an action based on the interpretations in Opinion No. 587 before initiating any contacts with agency decision makers or potential decision makers.

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[10] Under 1.06(S) of the Texas Rules of Disciplinary Procedure, an "Inquiry" means any written matter concerning attorney conduct received by the Office of Chief Disciplinary Counsel that, even if true, does not allege Professional Misconduct or Disability. According to 1.06(F) of the Rules, a "Complaint" means those written matters received by the Office of the Chief Disciplinary Counsel that, either on the face thereof or upon screening or preliminary investigation, allege Professional Misconduct or attorney Disability or both, cognizable under these rules or the Texas Disciplinary Rules of Professional Conduct.

[11] However, the Complainant has a right of appeal under Rule 2.10.

[12] *See* TEX. R. DISCIPLINARY P. 2.17 and 2.18.

EX PARTE ISSUES IN THE ADMINISTRATIVE SETTING: OPINION NO. 587 AND PROPOSED CHANGES TO RULE 3.05, TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT

EXHIBIT A

TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT

Table of Contents

		Page
Preamble: A Lawyer's Responsibilities		3
Preamble: Scope		4
Terminology		6
I. CLIENT-LAWYER RELATIONSHIP		
1.01	Competent and Diligent Representation	7
1.02	Scope and Objectives of Representation	9
1.03	Communication	12
1.04	Fees	13
1.05	Confidentiality of Information	19
1.06	Conflict of Interest: General Rule	25
1.07	Conflict of Interest: Intermediary	30
1.08	Conflict of Interest: Prohibited Transactions	32
1.09	Conflict of Interest: Former Client	35
1.10	Successive Government and Private Employment	38
1.11	Adjudicatory Official or Law Clerk	40
1.12	Organization as a Client	41
1.13	Conflicts: Public Interest Activities	45
1.14	Safekeeping Property	46
1.15	Declining or Terminating Representation	47
II. COUNSELOR		
2.01	Advisor	50
2.02	Evaluation for use by Third Persons	51
III. ADVOCATE		
3.01	Meritorious Claims and Contentions	52
3.02	Minimizing the Burdens and Delays of Litigation	53
3.03	Candor Toward the Tribunal	55
3.04	Fairness in Adjudicatory Proceedings	58
3.05	Maintaining Impartiality of Tribunal	61
3.06	Maintaining Integrity of Jury System	62

compliance. This situation can arise in criminal cases, for example, where the court orders disclosure of the identity of an informant to the defendant and the government decides that it would prefer to allow the case to be dismissed rather than to make that disclosure. A lawyer should consult with a client about the likely consequences of any such act of disobedience should the client appear to be inclined to pursue that course; but the final decision in that regard rests with the client.

Rule 3.05 Maintaining Impartiality of Tribunal

A lawyer shall not:

(a) seek to influence a tribunal concerning a pending matter by means prohibited by law or applicable rules of practice or procedure;

(b) except as otherwise permitted by law and not prohibited by applicable rules of practice or procedure, communicate or cause another to communicate ex parte with a tribunal for the purpose of influencing that entity or person concerning a pending matter other than:

(1) in the course of official proceedings in the cause;

(2) in writing if he promptly delivers a copy of the writing to opposing counsel or the adverse party if he is not represented by a lawyer;

(3) orally upon adequate notice to opposing counsel or to the adverse party if he is not represented by a lawyer.

(c) For purposes of this rule:

(1) Matter has the meanings ascribed by it in Rule 1.10(f) of these Rules;

(2) A matter is pending before a particular tribunal either when that entity has been selected to determine the matter or when it is reasonably foreseeable that that entity will be so selected.

Comment:

Undue Influence

1. Many forms of improper influence upon tribunals are proscribed by criminal law or by applicable rules of practice or procedure. Others are specified in the Texas Code of Judicial Conduct. A lawyer is required to be familiar with, and to avoid contributing to a violation of, all such provisions. See also Rule 3.06.

2. In recent years, however, there has been an increase in alternative methods of dispute resolution, such as arbitration, for which the standards governing a lawyer's conduct are not as well developed. In such situations, as in more traditional settings, a lawyer should avoid any conduct that is or could reasonably be construed as being intended to corrupt or to unfairly influence the decision-maker.

Ex Parte Contacts

3. Historically, ex parte contacts between a lawyer and a tribunal have been subjected to stringent control because of the potential for abuse such contacts present. For example, Canon 3A(4) of the Texas Code of Judicial Conduct prohibits many ex parte contacts with judicial officials. A lawyer in turn violates Rule 8.04(a)(6) by communicating with such an official in a manner that causes that official to violate Canon 3A(4). This rule maintains that traditional posture towards ex parte communications and extends it to the new settings discussed in paragraph 2 of this Comment.

4. There are certain types of adjudicatory proceedings, however, which have permitted pending issues to be discussed ex parte with a tribunal. Certain classes of zoning questions, for example, are frequently handled in that way. As long as such contacts are not prohibited by law or applicable rules of practice or procedure, and as long as paragraph (a) of this Rule is adhered to, such ex parte contacts will not serve as a basis for discipline.

5. For limitations on the circumstances and the manner in which lawyers may communicate or cause another to communicate with veniremen or jurors, see Rule 3.06.

From Rule 1.10(f), p. 42

(f) As used in this rule, the term matter does not include regulation-making or rule-making proceedings or assignments, but includes:

(1) Any adjudicatory proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge accusation, arrest or other similar, particular transaction involving a specific party or parties; and

(2) any other action or transaction covered by the conflict of interest rules of the appropriate government agency.

From "Terminology," p. 8:

"Tribunal" denotes any governmental body or official or any other person engaged in a process of resolving a particular dispute or controversy. Tribunal includes such institutions as courts and administrative agencies when engaging in adjudicatory or licensing activities as defined by applicable law or rules of practice or procedure, as well as judges, magistrates, special masters, referees, arbitrators, mediators, hearing officers and comparable persons empowered to resolve or to recommend a resolution of a particular matter; but it does not include jurors, prospective jurors, legislative bodies or their committees, members or staffs, nor does it include other governmental bodies when acting in a legislative or rule-making capacity.

EX PARTE ISSUES IN THE ADMINISTRATIVE SETTING: OPINION NO. 587 AND PROPOSED CHANGES TO RULE 3.05, TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT

EXHIBIT B

THE PROFESSIONAL ETHICS COMMITTEE FOR THE STATE BAR OF TEXAS
Opinion No. 587

May 2009

QUESTION PRESENTED

Before filing a matter with an administrative agency having decision-making authority over the matter, may a lawyer communicate with the administrative agency concerning the matter?

STATEMENT OF FACTS

A lawyer plans to file a matter with a state administrative agency that has decision-making authority over the matter. Before filing the matter, the lawyer proposes to communicate concerning the matter with persons in the agency for the purpose of ultimately obtaining a favorable decision from the agency. In such communications concerning the matter, the lawyer does not propose to provide copies of written communications or notice of oral communications to other potential parties in the matter.

DISCUSSION

Rule 3.05 of the Texas Disciplinary Rules of Professional Conduct provides as follows:

"Maintaining Impartiality of Tribunal
A lawyer shall not:

(a) seek to influence a tribunal concerning a pending matter by means prohibited by law or applicable rules of practice or procedure;

(b) except as otherwise permitted by law and not prohibited by applicable rules of practice or procedure, communicate or cause another to communicate ex parte with a tribunal for the purpose of influencing that entity or person concerning a pending matter other than:

(1) in the course of official proceedings in the cause;

(2) in writing if he promptly delivers a copy of the writing to opposing counsel or the adverse party if he is not represented by a lawyer;

(3) orally upon adequate notice to opposing counsel or to the adverse party if he is not represented by a lawyer.

(c) For purposes of this rule:

(1) 'Matter' has the meanings ascribed by it in Rule 1.10(f) of these Rules;

(2) A matter is 'pending' before a particular tribunal either when that entity has been selected to determine the matter or when it is reasonably foreseeable that that entity will be so selected."

Rule 3.05 provides that a lawyer shall not seek to influence a tribunal concerning a pending matter by means prohibited by law or applicable rules and that, except as permitted by law and not prohibited by applicable rules, a lawyer may not communicate ex parte with a tribunal for the purpose of influencing the tribunal concerning a pending matter except in one of three limited ways specified in Rule 3.05(b) – in official proceedings, in writing with copies to all parties, or orally with adequate notice to all parties.

Rule 3.05(c)(1) defines the term "matter" by reference to Rule 1.10(f). Rule 1.10(f) provides that the term "matter" does not include regulation-making or rule-making proceedings or assignments but that the term includes the following:

> "(1) Any adjudicatory proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge accusation, arrest or other similar, particular transaction involving a specific party or parties; and
>
> (2) any other action or transaction covered by the conflict of interest rules of the appropriate government agency."

Rule 3.05(c)(2) specifies that a matter is pending before a tribunal when the tribunal has been selected to determine the matter or it is reasonably foreseeable that the tribunal will be so selected. In the circumstances here considered, the matter is clearly "pending" for purposes of Rule 3.05 because the agency with which the communication occurs is expected to make a decision on the matter. As discussed in more detail below, the agency decision maker in these circumstances is a "tribunal" as that term is defined for purposes of the Texas Disciplinary Rules of Professional Conduct. Therefore, unless there is some applicable law that permits the lawyer to do so, under Rule 3.05 the lawyer may not communicate ex parte with the agency decision maker (or cause another to do so) for the purpose of influencing the outcome of the matter except in the limited ways specified in Rule 3.05(b). For purposes of applying Rule 3.05(b), there is no generally applicable law in Texas that permits the lawyer in these circumstances to communicate with the agency's decision maker, before a matter is filed, for the purpose of influencing the outcome of the matter. The Texas Supreme Court in *Vandygriff* v. *First Savings and Loan Association of Borger,* 617 S.W.2d 669 (Tex. 1981) held that the prohibition of what is now the Texas Administrative Procedure Act against ex parte communications in a pending matter does not apply to communications before a matter has been filed with an agency. However, that decision did not hold that such communications are affirmatively permitted by applicable Texas law. Accordingly, since under Rule 3.05(c)(2) of the Texas Disciplinary Rules of Professional Conduct a matter is "pending" before an administrative agency when future adjudicatory proceedings in the agency are reasonably foreseeable, ex parte communications with the agency decision maker prior to filing for the purpose of influencing the matter (except using a means specifically permitted by Rule 3.05(b)) would constitute a violation of Rule 3.05. This result applies even though the same communication would not be a violation of the Texas Administrative Procedure Act as interpreted by the Texas Supreme Court in the *Vandygriff* decision.

The question remains as to who is included within the term "tribunal" for purposes of applying the requirements of Rule 3.05. The Terminology section of the Texas Disciplinary Rules of Professional Conduct provides that

> "'Tribunal' denotes any governmental body or official or any other person engaged in a process of resolving a particular dispute or controversy. 'Tribunal' includes such institutions as courts and administrative agencies when engaging in adjudicatory or licensing activities as defined by applicable law or rules of practice or procedure, as well as judges, magistrates, special masters, referees, arbitrators, mediators, hearing officers and comparable persons empowered to resolve or to recommend a resolution of a particular matter; but it does not include jurors, prospective jurors, legislative bodies or their committees, members or staffs, nor does it include other governmental bodies when acting in a legislative or rule-making capacity."

In the application of this definition to administrative agencies, it is important to recognize that these agencies are legal hybrids that may have judicial, legislative, executive and ministerial functions. Rule 3.05 applies only to administrative agencies when they are, or will be, functioning as "tribunals," that is in a dispute-resolution, licensing or adjudicatory capacity and not when such agencies are functioning in a legislative, executive or ministerial capacity.

Whether applied to a court or an administrative agency, the restrictions of Rule 3.05 on communications with a tribunal could be read either to apply to communications with all personnel associated with a court or administrative agency or to apply only to communications with the judge or agency decision maker or decision-making body. The Committee is of the opinion that the term "tribunal" as defined in the Terminology section of the Texas Disciplinary Rules and as used in Rule 3.05 refers only to the judge or agency decision maker or decision-making body and not to all personnel associated with a court or administrative agency. In the case of an administrative agency, the decision maker could be an administrative law judge, a hearing officer, the executive in charge of the agency, or a board or other governing body of the agency. The decision maker, however, is not the agency itself or all of its members, representatives or employees. Lawyers routinely contact court and agency personnel other than decision makers to obtain answers to administrative questions, to obtain settings, to check on the status of pending matters and for a variety of other reasons where there could normally be no effect on the court's or agency's decision in the matter. In the case of communications with non-decision-making personnel of an agency, Rule 3.05 would apply only if such a communication was intended by the lawyer as an indirect communication, through non-decision-making personnel, with the decision maker for the purpose of influencing the outcome of the agency's decision in the matter.

This interpretation of Rule 3.05 as applicable only to communications with decision makers is consistent with the requirements of section 2001.061 of the Texas Government Code, the provision of the Texas Administrative Procedure Act specifically addressing ex parte communications. Section 2001.061(a) of the Texas Government Code provides in part:

". . . a member or employee of a state agency assigned to render a decision or to make findings of fact and conclusions of law in a contested case may not directly or indirectly communicate in connection with an issue of fact or law with a state agency, person, party, or a representative of those entities, except on notice and opportunity for each party to participate."

This provision generally prohibits certain ex parte communications in connection with an issue of fact or law in a contested case. The prohibition however, is only upon "a member or employee of a state agency assigned to render a decision or to make findings of fact and conclusions of law," in other words, the decision maker. See *County of Galveston* v. *Texas Department of Health*, 724 S.W.2d 115 (Tex. App. – Austin 1987, writ ref'd, n.r.e.); *Coalition Advocating A Safe Environment* v. *Texas Water Commission*, 798 S.W.2d 639 (Tex. App. – Austin 1990), vacated as moot, 819 S.W.2d 799 (Tex. 1991).

This interpretation of Rule 3.05 appropriately treats the situation in which an administrative agency that has authority to make the decision on a contested matter also is a party that takes an advocacy position in the matter through other agency personnel. The parties to the contested case, including the representatives of the agency taking an advocacy position, are not permitted to have ex parte communications with the agency decision maker for the purpose of influencing the outcome of the matter unless as required by Rule 3.05(b) all parties participate or are given an opportunity to participate. However, representatives of another party in the matter may communicate directly with the advocacy representatives of the agency in the matter without including in the communication all other parties in the matter, as would be required if the communication were subject to Rule 3.05(b).

Special laws or rules may apply to specific situations and govern communications in those specific situations. Comment 4 to Rule 3.05 notes the following:

"There are certain types of adjudicatory proceedings, however, which have permitted pending issues to be discussed ex parte with a tribunal. Certain classes of zoning questions, for example, are frequently handled in that way. As long as such contacts are not prohibited by law or applicable rules of practice and procedure, and so long as paragraph (a) of this Rule is adhered to, such ex parte contacts will not serve as a basis for discipline."

See also Texas Attorney General Opinion No. DM-144 (July 24, 1992) (special provisions applicable to the Texas Water Commission impose additional limitations, beyond the limitations of general administrative law, on ex parte communications of hearings examiners with other employees of the agency).

In the factual situation here considered, if there are no other applicable laws or rules of practice or procedure that prohibit or specifically permit ex parte communications with respect to the matter coming before the agency, Rule 3.05 imposes strict limits on a lawyer's ex parte communications with the decision maker of the agency for the purpose of influencing the decision maker concerning the matter. These limitations apply only to communications directly or indirectly with the decision maker within the agency as established by applicable law (such as

an administrative law judge, a hearing officer, the executive in charge of the agency, or a board or other governing body of the agency, including any individual member of that board or body). These limitations apply before the filing of the matter if it is reasonably foreseeable that the decision on the matter will be made by the agency. However, the limitations do not apply to communications with the members, employees or representatives of the agency who are not the decision maker or a member of the decision making body with respect to the matter provided that the communications with such persons are not intended to be indirect ex parte communications with the decision maker for the purpose of influencing the decision in the matter.

CONCLUSION

In the absence of applicable law that permits ex parte communications in a particular situation, Rule 3.05 of the Texas Disciplinary Rules of Professional Conduct imposes strict limits on ex parte communications with an agency's decision maker prior to the filing of a matter with an agency that is expected to act concerning the matter in a dispute resolution, licensing or adjudicatory capacity, if a purpose of the ex parte communication is to influence the agency's decision in the matter. However, in these circumstances, Rule 3.05 does not limit ex parte communications, either before or after the filing of the matter, with members, representatives or employees of the agency who are not the applicable decision maker or a member of the applicable decision making body unless such communications are intended to be indirect ex parte communications with the decision maker for the purpose of influencing the outcome of the matter.

EX PARTE ISSUES IN THE ADMINISTRATIVE SETTING: OPINION NO. 587 AND PROPOSED CHANGES TO RULE 3.05, TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT

EXHIBIT C

December 30, 2009

Professional Ethics Committee
Attn: Michelle Jordan, Attorney Liaison
Office of the Chief Disciplinary Counsel, State Bar of Texas
P.O. Box 12487
Austin, Texas 78711

Re: Reconsideration of Texas Professional Ethics Committee Opinion No. 587

Members of the Professional Ethics Committee:

The recently published decision in Texas Professional Ethics Committee Opinion No. 587 has generated discussion and concern in the legal community, especially among those of us who practice Administrative Law. In this Opinion, the Committee determined that Texas Disciplinary Rule of Professional Conduct 3.05 imposes strict limits on a lawyer's *ex parte* communications with an agency decision-maker prior to the filing of a matter with an agency that is expected to act on that matter.

As counsel to parties who regularly appear before state agencies, we request the Committee to withdraw Opinion No. 587. In support thereof, we attach for your consideration a Brief in Support of Request for Reconsideration of Opinion No. 587.

By copy of this letter, we are forwarding this Brief to Kennon L. Peterson, with a request that she accept this filing as a comment on the proposed amendments to Rule 3.05 of the Texas Rules of Professional Conduct.

Thank you for your consideration.

Respectfully submitted,

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cc: State Bar President Roland Johnson
Kennon L. Peterson, Rules Attorney, Supreme Court of Texas

BEFORE THE

PROFESSIONAL ETHICS COMMITTEE

OF THE

STATE BAR OF TEXAS

BRIEF IN SUPPORT OF REQUEST FOR RECONSIDERATION OF OPINION NO. 587

December 30, 2009

BRIEF IN SUPPORT OF REQUEST FOR RECONSIDERATION OF OPINION NO. 587

The persons submitting this Brief respectfully request the Professional Ethics Committee to reconsider Opinion No. 587 for the reasons stated below.

Introduction

Texas Professional Ethics Committee Opinion No. 587 ("Opinion 587" or "the Opinion") interprets Texas Disciplinary Rule of Professional Conduct 3.05 ("Rule 3.05") as it applies to communications between lawyers and administrative agencies. In the Opinion, the Committee concludes that Rule 3.05 imposes strict limits on a lawyer's communications with an agency decision-maker prior to the filing of a proceeding with that agency if the communication is intended to influence the agency's decision in the proceeding. Opinion 587 is wrong because it contradicts the language of the Disciplinary Rules and the clear and controlling precedent of the Texas Supreme Court. Rule 3.05 involves maintaining the impartiality of tribunals in connection with matters pending before a tribunal where there are specific parties involved. Prior to Opinion 587, the Disciplinary Rule had not been interpreted to extend to communications with agencies about issues or circumstances before they had evolved into pending adjudicatory proceedings. Following Opinion 587, lawyers are subject to a different rule than the clients they serve.

Moreover, under previously well-settled law, the statutory prohibitions against ex parte communications do not apply before a contested case has been filed (*i.e.*, before it becomes a pending matter). The Opinion eliminates a bright line rule of law that administrative lawyers and agency decision-makers and staff have relied on for years. The Opinion also creates an undesirable framework for practicing administrative law before Texas agencies because it greatly expands the scope of Rule 3.05 without

accounting for the realities of regulatory practice. Unlike courts, whose function is strictly judicial, administrative agencies have adjudicative, executive and legislative responsibilities in connection with the regulation of their subject matter. Effective administration and public service require that agencies have the ability to communicate with regulated entities as well as those served by regulated entities about a variety of circumstances that may (or may not) become pending adjudicatory matters. The interpretation adopted could prohibit an affected entity from relying upon its chosen legal representative to discuss those circumstances that may become pending matters, or preclude an agency decision-maker who is also an attorney from discussing any matters within the agency's jurisdiction with legal *or* non-legal representatives of entities that appear before that agency.

It appears the Committee was led into error by assuming the legitimacy of the question it attempted to answer. However, the question presented an illogical, nonsensical scenario by its references to a "matter" pending before it was filed and to the absence of notice to "potential parties." Neither concept is found in Rule 3.05, and the assumption that both concepts are legitimate resulted in an Opinion that outlaws long-standing practice, unduly impairs the ability of attorneys to effectively represent their clients before administrative agencies, directly conflicts with controlling precedent of the Texas Supreme Court, and unconstitutionally restricts the speech of those holding law licenses.

It is also important to note that the Texas legislature has already created a statute that makes it a crime for anyone to improperly influence an agency decision-maker. Section 36.04 of the Texas Penal Code clearly prohibits any person from exerting improper influence over public officials presiding over adjudicatory proceedings,

regardless of whether he or she is a lawyer. TEX. PENAL CODE § 36.04. This Brief and the circumstances that it presents do not involve exerting improper influence upon a decision-maker. They represent a concern that Rule 3.05 as interpreted will ban proper and legal communications simply because they are made with assistance from a person's chosen legal representative. Equal footing should be preserved among persons who attempt to legally influence a decision-maker under Texas law.

Discussion

I. Opinion 587 is wrong.

A. Opinion 587 expands the definition of a "pending matter" beyond the language of the rule.

Rule 3.05 applies to any "pending matter." The Rule defines "matter" by reference to Rule 1.10(f), which provides the definition of a legal matter, including "any adjudicatory proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge accusation [sic], arrest or other similar, particular transaction *involving a specific party or parties*." Tex. Disciplinary R. Prof'l Conduct 1.10(f) (emphasis added). Rule 3.05(c)(2) specifies that a matter is "pending" when a tribunal "has been selected to determine the matter or when it is reasonably foreseeable that the tribunal will be so selected." Rule 3.05 does not redefine the legal concept of a "matter," which, among other things, facially requires there to be a "party or parties." It only addresses communications made concerning matters while tribunal selection is pending. In many court systems, the time between filing and tribunal selection can be significant; however, the process can be automatic in administrative law because each agency has a specific statutory jurisdiction with a specific board or commission that renders the decision.

Opinion 587 creates a presumption that a legal matter is pending once a lawyer considers making a filing with an agency. The Question Presented and Statement of Facts pre-suppose that a matter already exists if the lawyer is planning a future filing with an agency. The Opinion implicitly reasons that because the lawyer was planning to make a filing and because it was reasonably foreseeable which agency would adjudicate it, a matter has been created that is "pending before a tribunal." However, the Opinion does not address what it means to "plan" to file a matter, nor is that concept to be found in the Rule. The Opinion also does not address how a legal matter can be "pending before a particular tribunal" *prior* to filing. The result is that Opinion 587 expands the definition of "pending matters" to include not only matters in pendency but also things that could become matters in the future. This expansion is clearly inconsistent with Rule 1.10(f), which defines matters in reference to legal matters (i.e., adjudicatory proceeding, applications, requests for rulings). Rule 3.05 applies to lawyer conduct in the context of these legal matters. It does not apply to events, activities, plans, estimations, considerations, or occurrences that may eventually manifest themselves as legal matters. Persons often communicate with an agency about issues, plans and concerns to help determine whether they will pursue an adjudicatory resolution or resolution by other means. At that point, a legal matter is not "pending" because a legal matter does not exist.

An adjudicatory proceeding does not exist until it has been formally initiated. An application has not been made until it has been filed. A request for a ruling does not exist until it has been requested. These cannot become "pending matters" merely because someone "plans" to file them. To be "pending before a particular tribunal," a legal matter must clearly be filed. Until a person pursues adjudicative resolution, no legal matter

exists, and no entity has been selected to determine the legal matter. The important point assumed away by the question in the form presented to the Committee is that a "pending matter" under the disciplinary rule is not something that may possibly someday become a matter; it is something already a matter that is "pending before a particular tribunal." A filed matter is pending before a particular tribunal when it is reasonably foreseeable that the tribunal will be selected to determine it. On the other hand, even if it is obvious which agency will have sole jurisdiction over a future filing, that fact does not change the rule's definition of a legal matter or make something a matter before it is filed. It does mean that upon becoming a defined legal matter by filing, it will be immediately pending before a particular tribunal whose selection has not been made but is reasonably foreseeable. In agency practice, this can happen immediately upon filing. By contrast, many court proceedings are filed with a clerk's office and only assigned to a particular court later.

The conclusion that a matter does not exist until filed is confirmed by Rule 1.10(f)'s requirement that a matter "involves a specific party or parties." Prior to the filing of a matter, there can be no specific party or parties because there is no proceeding that an entity or person can join as a party. Under Rule 1.10(f), a matter cannot be "pending" until it is filed and "specific" parties can become involved. Rule 1.10(f) does not define "party," but many agency rules do. For example, P.U.C. PROC. R. 22.102 defines "party" as including applicants, respondents, intervenors, and commission staff. It specifically excludes persons who have not yet intervened in a proceeding. P.U.C. PROC. R. 22.102(c). Opinion 587 expands the scope and effect of the disciplinary rule by neglecting the limiting language of Rule 1.10(f) and applying Rule 3.05 to "potential matters and parties," concepts not defined in the Opinion or

elsewhere in the law. This expansion of the rule not only contradicts Supreme Court precedent but dramatically alters the way lawyers practice before Texas agencies.

B. Opinion 587 contradicts controlling precedent of the Texas Supreme Court.

In *Vandygriff v. First Savings and Loan Association of Borger*, the Texas Supreme Court ruled that a meeting between the state savings and loan commissioner and a charter applicant was not prohibited by the ex parte communications provisions of the Administrative Procedure Act ("APA"). 617 S.W.2d 669, 672 (Tex. 1981) (citing TEX. REV. CIV. STAT. art. 6252-13a § 17 (repealed 1993), currently TEX. GOV'T CODE 2001.061)). The Court found that a contested case was not pending at the time of the communication because the application that would have initiated that proceeding had not yet been filed. Therefore, the meeting was not an ex parte communication because it did not occur while a matter was pending. Opinion 587 contradicts this decision.

Opinion 587 argues that, although *Vandygriff* did not prohibit ex parte communications prior to the filing of a proceeding, it did not specifically "*permit*" those communications either. Rule 3.05 provides that "except as otherwise permitted by law and not prohibited by applicable rules of practice or procedure," a lawyer shall not "communicate or cause another to communicate ex parte with a tribunal for the purpose of influencing that entity or person concerning a pending matter." Tex. Disciplinary R. Prof'l Conduct 3.05(b). The Opinion concludes that Rule 3.05 should apply to pre-filing communications because no other laws "*specifically* permit ex parte communications with respect to the matter coming before the agency." Opinion 587 at 4 (emphasis added).

Opinion 587 draws a questionable distinction between the terms "permitted" and "not prohibited." The Opinion assumes that the Supreme Court does not "permit" *ex*

parte communications when the Court held that such communications are "not prohibited." *Vandygriff*, 617 S.W.2d at 672. This is a wrong interpretation of *Vandygriff*. Texas law does not provide the Committee with this authority to re-interpret or reject Supreme Court decisions. Under the most basic rules of statutory construction, the APA's specific prohibition of certain communications is an implicit authorization of communications not falling within the statutory exclusion. Under the time-honored doctrine of *expressio unius est exclusio alterius*, the inclusion of a specific limitation in a statute excludes all other limitations. *See United Services Auto. Ass'n v. Brite*, 215 S.W.3d 400, 403 (Tex. 2007) (citing *Mid-Century Ins. Co. of Tex. v. Kidd*, 997 S.W.2d 265, 273-74 (Tex. 1999)). The Supreme Court is right: the Committee's contrary interpretation is both unauthorized and wrong.

Moreover, Rule 3.05(b) does not state that a law must *specifically* permit a communication in order to be excepted from the rule. It states that a law must "permit and not prohibit" a communication in order to be excepted from the rule. Tex. Disciplinary R. Prof'l Conduct 3.05(b). Comment 4 to Rule 3.05 states that as long as "contacts are *not* prohibited by law or applicable rules of practice or procedure . . . such ex parte contacts will not serve as a basis for discipline." *Id.* 3.05 cmt. 4. It does not state that ex parte contacts must be "permitted" or "specifically permitted" by law. Opinion 587 adds the word "specifically" to the rule in order to distinguish the Committee's interpretation from the Supreme Court's holding in *Vandygriff*. Texas law does not give the Ethics Committee power to re-write the Rules of Professional Conduct on an *ad hoc* basis. In any event, as discussed below, the U.S. Constitution guarantees that speech is *always* permitted except for compelling reasons not present here. By

requiring a "specific" statutory or rule authorization for speech, the Committee has rendered the Rule unconstitutional.

Furthermore, the Opinion neglects a key element of the *Vandygriff* holding. *Vandygriff* holds that communications between the state savings and loan commissioner and the charter applicant were not prohibited under the law because a contested case was not pending at the time the communications occurred. A contested case was not pending because an application had not yet been filed. *Hammack v. Pub. Util. Comm'n of Tex.*, 131 S.W.3d 713, 731 (Tex. App.—Austin 2004, pet. denied) (quoting *Vandygriff*, 617 S.W.2d at 671). If a case is not pending until a matter has been filed, then ex parte communications cannot occur until a matter has been filed. Opinion 587 directly contradicts *Vandygriff* on this issue.

The State Bar of Texas operates under a delegation of authority that gives it the power "in aid of the judicial department's powers under the constitution to regulate the practice of law, *and not to the exclusion of those powers.*" TEX. GOV'T CODE § 81.011 (emphasis added). The Texas Supreme Court exercises administrative control over the State Bar, and the State Bar and the Professional Ethics Committee operate as delegatees of that authority. The Ethics Committee may not re-interpret or reject Supreme Court decisions. Persons practicing law in the state rely on the established precedent of the state's highest court, which is the ultimate supervisor of the practice of law in the state.

Opinion 587 eliminates the bright line rule of law established by *Vandygriff* that administrative lawyers and agency decision-makers and staff have relied on for years. Representatives of most regulated industries and customer groups regularly come before regulators to provide reports on the status of their business, advise agency representatives of matters likely to be the subject of legislative or press inquiries, discuss matters that are

subject to rulemaking, and seek informal advice concerning business practices and policy. These communications promote efficient regulation and are not prejudicial to a fair hearing. Opinion 587 removes this bright line rule for lawyers only. Without a bright line rule, the ability of lawyers to represent their clients in these otherwise permissible and beneficial contacts becomes uncertain. This bright line rule is defensible in its own right as good policy, and the principle of *stare decisis*—stability and predictability in the law—suggests that the Supreme Court itself would use caution about setting aside or weakening *Vandygriff*. Opinion 587 does not observe this caution.

C. Opinion 587 infringes upon a person's constitutional right to free speech, to petition the government and to retain counsel of his choice.

The very notion that speech may be restricted unless some statute or rule expressly permits it is foreign to American jurisprudence. *Vandygriff* reflects a proper refusal by the Supreme Court to abridge communications not expressly prohibited by statute for compelling reasons. A lawyer has a right to free speech and to express his opinion that cannot be entirely abridged by the state bar rules of conduct. *Comm'n for Lawyer Discipline v. Benton*, 980 S.W.2d 425, 431-32 (Tex. 1998). A lawyer has a right to petition government for redress of grievances. *See* U.S. CONST. amend. I; TEX. CONST. art. I, § 27. That right extends to all departments of the government, including administrative agencies. *Cal. Transport v. Trucking Unlimited*, 404 U.S. 508, 510 (1972). A person has a right in civil matters "to choose the lawyer who will provide that representation." *Tex. Catastrophe Prop. Ins. Ass'n v. Morales*, 975 F.2d 1178, 1181 (5th Cir. 1992) (quoting *McCuin v. Tex. Power & Light Co.*, 714 F.2d 1255, 1262-65 (5th Cir. 1983)). A person has a right to equal protection under the law so that the laws "operate equally and uniformly upon all persons in similar circumstances." *Sanders v. Palunsky,*

36 S.W.3d 222, 224-25 (Tex. App.—Houston [14th Dist.] 2001, no pet.). These rights can only be impinged if the State Bar can show compelling reasons. *Tex. Catastrophe Prop. Ins. Ass'n*, 975 F.2d at 1181 (stating that "important" reasons do not suffice where the Constitution requires compelling ones).

For instance, in *Republican Party of Minnesota v. White*, 536 U.S. 765, 774-75 (2002), the U.S. Supreme Court held that a state supreme court's code of conduct was a regulation of speech. The court held that the proper test to determine the constitutionality of a regulation on speech was the strict scrutiny test. Under the strict scrutiny test, a party must prove a regulation is narrowly tailored to serve a compelling state interest. In order for the party to show that the regulation is narrowly tailored, the party must demonstrate that the regulation does not unnecessarily circumscribe protected expression. The Texas Supreme Court has indicated that a lawyer's speech may be afforded even more protection than the First Amendment requires. In *Commission for Lawyer Discipline v. Benton*, the Court held that a lawyer's speech is protected by the First Amendment as long as it does not create a "substantial likelihood of material prejudice to the administration of justice." *Comm'n for Lawyer Discipline*, 980 S.W.2d at 431. Opinion 587 is not narrowly tailored to further a compelling state interest. Opinion 587 does not provide protections that would limit the prohibition to communications that create a substantial likelihood of material prejudice. Rather, by requiring a "specific" authorization for speech, Opinion 587 effectively prevents *all* communications between lawyers and agency decision-makers on any subject that might eventually become a "matter." The Opinion does not state compelling reasons for these broad restrictions.

D. Opinion 587 unwisely treats lawyer and non-lawyer communications differently.

The Opinion also unwisely magnifies the distinction between communications that a lawyer has with an agency and the communications a non-lawyer has, which gives a non-lawyer an advantage in litigation because he can communicate with an agency decision-maker before a matter is filed. This advantage discourages persons from utilizing legal counsel to represent them in certain matters before an agency. It also disrupts the equal and uniform operation of the law by creating an uneven playing field among lawyers and non-lawyers. The Ethics Committee does not express a rational basis for creating this distinction between how lawyers and non-lawyers may communicate with an agency decision-maker.

II. Opinion 587 neglects the realities of administrative law practice and creates discriminatory disadvantages for persons holding law licenses.

Agencies operate in legislative, executive, and adjudicatory capacities, and issues that come up in a legislative capacity, such as a rulemaking, often carry over into subsequent rate cases or other adjudication. Client and lawyer contact with administrative agencies is common. Regulated entities and those they serve often have extensive and ongoing relationships with their regulators that include regular meetings and communications. Clients often have more than one concurrent proceeding before an agency and issues between proceedings often overlap. By expanding Rule 3.05 to cover communications before a matter is filed, Opinion 587 imposes an unworkable limitation upon the procedures of the various Texas agencies and fails to account for the realities of practicing law before Texas agencies. The Opinion trades the bright line rule crafted by the Supreme Court for a nebulous new standard that is impossible to interpret consistently. For example:

- A lawyer cannot provide timely notice of a pre-filing communication with an agency decision-maker because, prior to the filing of a matter, there are no parties to whom to provide notice;
- A lawyer cannot communicate with an agency decision-maker to decide whether a matter will be filed;
- A lawyer cannot accurately predict whether certain matters will ever be filed or whether those matters will fall under the Opinion's prohibitions;
- The Texas statutes that were specifically drafted and passed to regulate administrative practice permit the exact actions that are prohibited by the Disciplinary Rules;
- Executive officers with law licenses are prevented under the Opinion from discussing their companies' business with agency decision-makers while executive officers who do not have law licenses and represent competing companies are not;
- A lawyer is on unequal footing with a non-lawyer advocate who does not have to abide by the Disciplinary Rules;
- A lawyer cannot counsel his client if he does not know whether his advice will constitute an indirect communication with an agency decision-maker that violates the Disciplinary Rules;
- A grievance committee has no way of determining whether a lawyer intends to influence an agency decision-maker;
- A lawyer who is an agency decision-maker cannot communicate with any entity that may come before the agency if he or she is uncertain whether that entity will file a proceeding;
- Opposing parties are encouraged by Opinion 587 to pursue endless and expensive peripheral litigation.

This is bad public policy.

A. Before a filing, a lawyer has no way to communicate in compliance with the Opinion 587 interpretation.

The subsections of Rule 3.05(b) give three permissible means of communicating with a tribunal while a matter is pending. When the definition of matter is extended to include things that may become pending matters, the effect is to expand the rule and ban all tribunal communications for the expanded area. For example, a lawyer cannot use (b)(1) to communicate "in the course of official proceedings in the cause" because there is no cause with official proceedings. Under (b)(2) and (b)(3), he cannot communicate by notifying other parties because there are no other parties. The communications are effectively outlawed because the lawyer cannot provide notice.

This imposes a considerable burden upon lawyers and agencies because lawyers often contact agency decision-makers to determine the viability of filing a matter with that agency. This communication occurs before a lawyer has decided whether to file a petition and could affect whether a matter is filed or would just be a waste of the agency's and the client's time. The lawyer's purpose in this communication is often to sound out the agency decision-maker as to his client's position, but the lawyer will not be able to predict whether he will make a filing with the agency until he speaks with the agency decision-maker. Furthermore, because there is no proceeding and no parties before a matter is filed, the lawyer cannot notify anyone of his communications with the agency decision-maker. Rule 3.05 indicates that he can only communicate orally with an agency decision-maker "upon adequate notice to opposing counsel." But before a proceeding is filed, there can be no "opposing counsel," so there can be no notice. The Disciplinary Rules do not contain the term "potential parties" or indicate how to determine whether a party is potential or what standard a lawyer would be held to in making such a determination. Even if a lawyer could divine whether a potential matter will come before the agency, he will not be able to predict which parties will be taking part in the proceeding and certainly not every potential party that might intervene.

Under these circumstances, it is clearly impossible for a lawyer to comply with the Opinion, except by entirely foregoing communications with the agency.

B. It is impossible to predict whether certain matters will come before an agency or whether those matters will fall under the Disciplinary Rules.

Even if there were parties to notify of a communication, it may be impossible to predict whether a matter will come before an agency or whether that matter will be covered by the Disciplinary Rules.

Rule 3.05(c)(2) states that a matter is pending before a tribunal when it is "reasonably foreseeable" that an agency will hear the matter. Tex. Disciplinary R. Prof'l Conduct 3.05(c)(2). In practice, it is *always* reasonably foreseeable that a matter involving a particular regulated industry could be filed and come before an agency that regulates the industry. Agencies operate in legislative, executive, and adjudicatory capacities. Some issues that may arise in a legislative capacity will carry over into subsequent adjudications. *Application of Texas-New Mexico Power Co. for Authority to Change Rates*, Docket Nos. 10200 and 10034, 19 P.U.C BULL. 89 (Mar. 18, 1993) (recognizing that, due to the on-going nature of the regulatory process, substantive issues in its various rate cases will necessarily overlap and be of a continuing nature). Clients and lawyers frequently contact agencies to provide updates on their businesses or to gauge the viability of filing a proceeding with the agency. Clients often have more than one concurrent proceeding, and a matter that comes up during one proceeding will often have an effect on other proceedings. Thus, a seasoned lawyer in administrative practice knows that it is always reasonably foreseeable that a communication he has with an agency decision-maker could include topics that will eventually come before that agency in a subsequent proceeding. Cautious lawyers and agency decision-makers, then, will resist having *any* contact with each other, even outside an adjudicatory context, to avoid the risk of violating Rule 3.05.[1] Tex. Disciplinary R. Prof'l Conduct, Preamble; Opinion 587 at 5. This would greatly disrupt (indeed, has already disrupted) the practice of administrative law.

Furthermore, lawyers cannot always be certain whether a proceeding falls within the Rules. Rule 3.05 applies when an administrative agency is functioning "in a dispute-

[1] The Chairman of the Public Utility Commission has stated that he now refuses to meet with parties who may have a future proceeding before the Commission.

resolution, licensing, or adjudicatory capacity." Opinion 587 at 3. The Rule does not apply when an agency functions in a "legislative, executive, or ministerial capacity." *Id.* As stated in *Public Utility Comm'n of Texas v. Allcomm Long Distance*, "[r]atemaking is a legislative activity, even when delegated to an administrative agency." 902 S.W.2d 662, 669 (Tex. App.—Austin 1995, writ denied); *see City of Alvin v. Pub. Util. Comm'n of Tex.*, 876 S.W.2d 346, 362 (Tex. App.—Austin 1993) *writ dism'd*, 893 S.W.2d 450 (Tex. 1994); *R.R. Comm'n of Tex. v. Houston Natural Gas Corp.*, 155 Tex. 502, 289 S.W.2d 559, 562 (1956). But under the PUCT Procedural Rules, a ratemaking proceeding is a "contested case," to which the PUCT's ex parte prohibitions and, presumably, Rule 3.05 apply. *See* P.U.C. PROC. R. 22.2(16) (defining "contested case" as "[a] proceeding, including a ratemaking or licensing proceeding, in which the legal rights, duties, or privileges of a party are to be determined by a state agency after an opportunity for adjudicative hearing").

It also remains uncertain whether or when Rule 3.05 applies to uncontested licensing, permitting or enforcement proceedings. For example, the Executive Director of the Texas Commission on Environmental Quality ("TCEQ") has been delegated final decision-making authority in uncontested licensing, permitting or enforcement proceedings before that agency. These decisions are made without a hearing and without the participation of the TCEQ Commissioners. The ex parte provisions of the APA do not apply to these actions, and it has been the course of conduct of practitioners before that agency to communicate with the Executive Director and the Executive Director's staff on all issues in the uncontested proceedings. In contested proceedings, the Commissioners make the final decision, and the Executive Director serves as an advocate. In that case, rules of ex parte communications strictly apply to

communications with the Commissioners. Since the Opinion would apply when an administrative agency is functioning "in a dispute-resolution, licensing, or adjudicatory capacity," Opinion 587 could threaten disciplinary action against a lawyer who is abiding by the rules of practice before the agency and where the communications are occurring only with the Executive Director and the Executive Director's staff. Obviously, if a case is not contested, there will be no party to notify, but lawyers do not always know whether a case will be contested. Moreover, during the period of time after an application is filed and before notice of the application is published, interested persons are not yet apprised of the existence of the application. In this case, a lawyer might be expected to follow Rule 3.05 before the lawyer knows who the agency decision-maker on the case will be.

C. Opinion 587 conflicts with the Texas Administrative Procedure Act.

Opinion 587 directly contradicts the APA. The APA permits a lawyer to communicate with an agency decision-maker about a matter prior to filing that matter with the agency. Opinion 587 considers this a violation. As a result, a lawyer who abides by the requirements of the APA can be disciplined under the Opinion for the same actions.

The APA was conceived by the Texas legislature to provide minimum standards of uniform practice and procedure for state agencies. TEX. GOV'T CODE § 2001.001. If the Ethics Committee determines that certain acts which are permitted under the APA are impermissible under the Disciplinary Rules, the Committee is effectively regulating the procedural laws that the Texas Legislature created to guide administrative practice. This regulation not only infringes upon the role of the Legislature and Texas' elected legislators to create and pass laws, but it alters the procedural rules adopted by each Texas agency. Texas law does not grant the Ethics Committee authority to contradict the

Administrative Procedures Act or to make overriding changes to Texas agencies' procedural rules.

D. A non-lawyer who comes before an agency has a distinct advantage over a lawyer with competing interests.

Non-lawyers frequently come before Texas agencies to influence the decisions of an agency decision-maker. Engineers, CEOs, lobbyists, consumer rights advocates, legislators, other agency heads, citizens, businessmen, and other states' regulatory commissioners often contact agency decision-makers to advance their interests or those of their employers, clients, or constituents. Some agencies permit the representation of parties to a contested case by non-lawyers. These non-lawyers are not bound by the Disciplinary Rules of Professional Conduct, so they are not operating under the same limits as lawyers who come before an agency decision-maker. Therefore, non-lawyers enjoy a distinct advantage over a lawyer because a non-lawyer can communicate freely with an agency decision-maker prior to the filing of a matter without fear of violating the Disciplinary Rules. This gives a clear and distinct advantage to non-lawyers who compete in litigation against lawyers. It may also compel entities to employ non-lawyers instead of lawyers to represent their interests before an agency decision-maker prior to a matter being filed. This places more people before agency decision-makers who do not specialize in administrative law and who are not well-versed in the regulatory process. This is clearly not a desirable result to be imposed by an entity of the mandatory State Bar.

Moreover, the executive officers of many companies that come before an agency are licensed to practice law in the state and are bound by the Disciplinary Rules of Professional Conduct. These executives will be limited by Rule 3.05 in how they do business for their companies before an agency. Executives who are not licensed to

practice law and who represent companies with competing interests will enjoy a distinct advantage before an agency because they will be bound only by the *Vandygriff* holding, and not by the Opinion's expansive definition of "matter." In this connection, Rule 3.05 may not be consistent with a party's right to free speech and to petition the government. The executives of most regulated industries frequently come before regulators to discuss matters that are subject to rulemaking or seek informal advice concerning business practices and policy. Executives and agency decision-makers often rely on this frequent contact to ensure efficient regulation. "Appropriate communications between the Commission and a utility are an essential part of the Commission's oversight function." *Hammack v. Pub. Util. Comm'n of Tex.*, 131 S.W.3d 713, 732 (Tex. App.—Austin 2004, pet. denied). Uncertainty as to the ethical rules will prevent licensed persons from communicating with the agency in this way, but it will not limit non-licensed parties from speaking with an agency decision-maker, even if their intent *is* to influence the decision-maker. This gives companies with non-licensed chief executives a considerable advantage.

The Ethics Committee should not impose upon certain persons with interests before agencies additional burdens that the law does not impose upon others.

E. A lawyer cannot counsel his client if he does not know whether his advice will constitute an indirect communication with an agency decision-maker that violates the Disciplinary Rules.

Under Rule 3.05, a lawyer may not influence an agency decision-maker by indirectly communicating with the decision-maker through a client. How that prohibition interacts with the Prohibition created in the Opinion is uncertain. This creates a considerable burden on the attorney-client relationship. Clients frequently communicate directly with agency decision-makers, and lawyers often advise clients on legal issues

that may arise in some future proceeding in order to educate clients as to the effect of a regulation on the client's business. This is a necessary and integral aspect of the lawyer-client relationship. An attorney who advises his client about issues that may arise in a future proceeding has no way of knowing whether that communication will be used to influence an agency decision-maker or whether the communication will violate the Disciplinary Rules.

Rule 4.02 provides some guidance regarding communications between an attorney and an adverse party. The rule prohibits communications "that in form are between a lawyer's client and another person, organization or entity of government represented by counsel where, because of the lawyer's involvement in devising and controlling their content, such communications in substance are between the lawyer and the represented person, organization or entity of government." Texas Disciplinary Rule of Prof'l Conduct 4.02 cmt. 1. Rule 4.02 exempts these communications "as long as the lawyer does not cause or encourage the communication without the consent of the lawyer for the other party." *Id.* at cmt. 2; *see In re News America Pub., Inc.*, 974 S.W.2d 97, 100 (Tex. App.—San Antonio 1998, no pet.) (stating that a lawyer should not "orchestrate or encourage" contact between her client and an opposing party who is represented by counsel). If Rule 3.05 is applied in the same way as Rule 4.02, then determining whether a party is attempting to influence an agency will depend on the lawyer's involvement in "orchestrating" or "encouraging" the communication between the client and the decision-maker and "devising and controlling" the content of that communication.

Furthermore, the Rules do not provide guidance as to how a grievance committee will determine the intent element inherent in the Rule in this context. Rule 3.05 applies only if a communication is "intended by the lawyer as an indirect communication . . .

with the decision-maker for the purpose of influencing the outcome of the agency's decision." Opinion 587 at 3. But, it is arguable that *any* conversation between a lawyer and a client could eventually be used to influence an agency decision-maker, and it is impossible to say with any certainty whether such communication was intended to have that effect. Good legal counsel is persuasive by nature. An attorney owes his client a duty to inform his client of all matters material to his representation. *Willis v. Maverick,* 760 S.W.2d 642, 645 (Tex. 1988). An attorney cannot meet this duty if he is limited in what he can say to the client because that client may take his legal advice and employ it in discussions with an agency decision-maker.

F. Some agency decision-makers who are licensed to practice law have already cut off communications with entities that may become involved in a future proceeding before the agency because they are uncertain whether Rule 3.05 now applies them.

The Ethics Committee has never ruled directly on whether the Texas Disciplinary Rules of Professional Conduct apply to an agency decision-maker who is a lawyer licensed to practice in the state,[2] but Opinion 587 has caused much uncertainty among agency heads as to how they may interact with persons that come before the agency. At the July 31, 2009 Open Meeting of the Public Utility Commission, Commissioners Donna Nelson and Kenneth Anderson, both of whom are attorneys, expressed on the record their uncertainty as to whether Opinion 587 would apply to their communications with entities who may come before them. *See* Transcript of July 31, 2009, Open Meeting. PUCT Chairman Barry Smitherman, who is also an attorney, has indicated that his uncertainty as to the scope of Rule 3.05 has compelled him to refuse to meet with *any* person who may eventually be involved in a proceeding that comes before the

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[2] The Committee has ruled that the disciplinary rules apply to a lawyer who is also a city commissioner, a county commissioner, a county judge, or a municipal judge, but it has not indicated whether an agency head is bound by the Disciplinary Rules when acting in a public capacity. Tex. Comm. on Prof'l Ethics, Op. 554 (2004).

Commission. An agency cannot operate efficiently or effectively if agency heads with law licenses do not know whether they are permitted to meet with regulated persons and to what extent their communications are limited.

This issue exposes another considerable flaw in Opinion 587. The Opinion does not account for the fact that Texas law imposes different policy considerations upon lawyers who act in different capacities within the governmental system. The Texas Supreme Court has specifically noted that public policy considerations may come into play when determining whether a lawyer's actions constitute a violation of the Disciplinary Rules. In *Joe v. Two Thirty Nine Joint Venture*, the Court found that Disciplinary Rule 1.13, regarding conflicts of interest related to an attorney's involvement with certain public interest activities, did not apply to a lawyer who was acting as a legislator where his actions constituted legitimate legislative functions. 145 S.W.3d 150, 158-59 (Tex. 2003).

Similarly, a lawyer who is acting for an agency will operate under laws that reflect specific public policy concerns related to his role in adjudicating regulatory proceedings. For instance, an agency general counsel has a right to advise his or her agency administrator about the underlying law in a proceeding, and he or she has a right to supervise the attorneys who represent the agency in those proceedings. A general counsel is acting under unique policy concerns. Opinion 587, however, limits *any* person with a law license, including agency general counsel, from giving advice to an agency decision-maker that is intended to influence that decision-maker. Under Opinion 587, general counsel cannot perform both of these services without violating Rule 3.05.

This issue regarding the application of the Disciplinary Rules to agency heads and general counsel is ignored by Opinion 587.

G. The new interpretation of Rule 3.05 encourages opposing parties to pursue endless and expensive peripheral litigation of ex parte issues.

An inevitable side effect of the Committee's unwarranted expansion of Rule 3.05 is that it creates an opportunity for opposing parties to pursue expensive and unnecessary litigation of ex parte issues in order to disrupt or prolong regulatory proceedings. If an entity who was not pre-notified of communications with an agency decision-maker intervenes in a proceeding, that entity can use the Disciplinary Rules to argue that prohibited ex parte communications occurred. Many administrative proceedings are time-sensitive and involve rate changes, the granting or revoking of licenses, or the assessment of fines. Prolonging such litigation with peripheral claims of improper communications can benefit parties that inevitably will be negatively affected by a quick resolution.

Persons could also use the Disciplinary Rules as a basis for arguing that agency decision-makers who took part in communications should be required to recuse themselves. Or, persons could use the threat of ethical complaints to dissuade lawyers from communicating with agency decision-makers or to otherwise chill a lawyer's spirited advocacy on behalf of his client. In short, the Opinion can be tactically employed to slow proceedings or allow parties with greater interests to wear down opposing parties with litigation costs. Agency decision-makers will also be dragged into unnecessary, expensive, and time-consuming litigation of pre-filing communication issues.

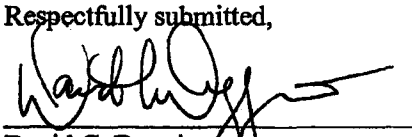
Conclusion

As it now stands, Opinion 587 will have far-reaching negative implications for how attorneys communicate with state agencies. The Opinion not only contradicts state law and established Supreme Court precedent but also neglects the realities of

administrative law practice. The Opinion offers little specific guidance as to how Rule 3.05 will be applied or how agency lawyers and lawyers who practice before agencies can do their jobs without violating the Disciplinary Rules. This uncertainty burdens parties and lawyers with a constant threat of disciplinary action and disrupts the agencies that rely on frequent contact with stakeholders in regulated industries and their counsel to ensure efficient regulation.

The Committee should reconsider these issues and promulgate an opinion in harmony with the terms of Rule 3.05, the statutes of this State governing ex parte communications, established Supreme Court precedent, and the Constitutions of the United States and Texas.

Respectfully submitted,



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EX PARTE ISSUES IN THE ADMINISTRATIVE SETTING: OPINION NO. 587 AND PROPOSED CHANGES TO RULE 3.05, TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT

EXHIBIT D

MAY 24 2010

THE PROFESSIONAL ETHICS COMMITTEE
FOR THE STATE BAR OF TEXAS

May 20, 2010

David C. Duggins
Clark, Thomas & Winters
P.O. Box 1148
Austin, Texas 78767

Re PEC No. 10-6

Dear Mr. Duggins:

This letter is being sent to you as the primary contact for the group of attorneys requesting reconsideration of Ethics Opinion 587. Please feel free to share this communication with the other members of your group.

The Professional Ethics Committee has taken the following actions with respect to the request for reconsideration of Opinion 587 dated December 30, 2009: (1) The request, treated as a request to reconsider the conclusions reached in Opinion 587, has been denied; (2) the request, treated as a request for an opinion clarifying certain issues relating to Opinion 587, has been accepted for further action by the Committee. The request has been assigned PEC #10-6.

The Committee will send you a copy of its opinion upon disposition. If you have any questions, please do not hesitate to contact Michelle Jordan, Liaison to the Professional Ethics Committee, or myself at 512.427.1350.

Sincerely,

Shelly Hogue
Legal Assistant to the
Professional Ethics Committee

c Mr. John Glancy, Chairman Professional Ethics Committee

EX PARTE ISSUES IN THE ADMINISTRATIVE SETTING: OPINION NO. 587 AND PROPOSED CHANGES TO RULE 3.05, TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT

EXHIBIT E

Proposed Amendments to Texas Disciplinary Rules of Professional Conduct
Date: July 7, 2010

TABLE OF CONTENTS

		Page
Terminology		
Rule 1.00.	Terminology	1
Section I.	**Client-Lawyer Relationship**	
Rule 1.01.	Competent and Diligent Representation	4
Rule 1.02.	Scope of Representation and Allocation of Authority	6
Rule 1.03.	Communication	10
Rule 1.04.	Fees	12
Rule 1.05.	Confidentiality	18
Rule 1.06.	Conflicts of Interest	26
Rule 1.07.	Conflicts of Interest: Multiple Clients in the Same Matter	34
Rule 1.08.	Conflicts of Interest: Prohibited Transactions	39
Rule 1.09.	Conflicts of Interest: Former Client	47
Rule 1.10.	Special Conflicts of Interest: Former and Current Government Officers and Employees	51
Rule 1.11.	Special Conflicts of Interest: Adjudicatory Officials, Third-Party Neutrals, and Court Lawyers	55
Rule 1.12.	Organization as a Client	58
Rule 1.13.	Prohibited Sexual Relations	62
Rule 1.14.	Diminished Capacity	64
Rule 1.15.	Safekeeping Property	66
Rule 1.16.	Declining or Terminating Representation	69
Rule 1.17.	Prospective Clients	72
Section II.	**Counselor**	
Rule 2.01.	Advisor	75
Rule 2.02.	Evaluation for Use by Third Persons	77
Section III.	**Advocate**	
Rule 3.01.	Meritorious Claims and Contentions	78
Rule 3.02.	Minimizing the Burdens and Delays of Litigation	80
Rule 3.03.	Candor Toward a Tribunal	81
Rule 3.04.	Fairness in Adjudicatory Proceedings	86
Rule 3.05.	Maintaining the Impartiality of a Tribunal	88

Rule 3.05. Maintaining the Impartiality of a Tribunal

A lawyer shall not:

(a) seek to influence a tribunal concerning a pending matter by means prohibited by law or applicable rules of practice or procedure;

(b) except as otherwise permitted by law and not prohibited by applicable rules of practice or procedure, communicate or cause another to communicate ex parte with a tribunal for the purpose of influencing the tribunal concerning a pending matter other than:

(1) in the course of official proceedings in the cause;

(2) in writing if the lawyer promptly delivers a copy of the writing to opposing counsel or the adverse party if the adverse party is not represented by a lawyer; or

(3) orally upon adequate notice to opposing counsel or to the adverse party if the adverse party is not represented by a lawyer.

Terminology: See Rule 1.00 for the definitions of "represents," "tribunal," and "writing."

Comment:

Undue Influence

1. Many forms of improper influence on tribunals are proscribed by criminal law or by rules of practice or procedure. Others are specified in the Texas Code of Judicial Conduct. A lawyer is required to be familiar with, and to avoid contributing to a violation of, all such provisions.

2. Use of alternative methods of dispute resolution, such as arbitration, has increased in recent years. In alternative-dispute-resolution settings, as in court proceedings, a lawyer should avoid any conduct that is or could reasonably be construed as being intended to corrupt or to unfairly influence the decision-maker.

Ex Parte Contacts

3. Historically, ex parte contacts between a lawyer and a tribunal have been subjected to stringent control because such contacts present the potential for abuse. For example, the Texas Code of Judicial Conduct prohibits many ex parte contacts with judicial officials. A lawyer in turn violates Rule 8.04(a)(6) by communicating with such an official in a manner that causes that official to violate the Texas Code of Judicial Conduct. This Rule maintains that traditional posture towards ex parte communications and extends it to the newer settings discussed in Comment 2.

4. Certain types of adjudicatory proceedings, however, have permitted a lawyer to discuss pending issues ex parte with a tribunal. Certain classes of zoning questions, for example, are frequently handled in that way. As long as such contacts are not prohibited by law or rules of practice or procedure, and as long as a lawyer adheres to paragraph (a) of this Rule, such ex parte contacts will not serve as a basis for discipline.

5. For limitations on the circumstances and the manner in which lawyers may communicate or cause another to communicate with venire members or jurors, see Rule 3.06.

From proposed Rule 1.00, Terminology, and proposed Comment 4 to Rule 1.00:

(u) "Tribunal" denotes a court, an arbitrator in a binding arbitration proceeding, or a legislative body, an administrative agency, or another body acting in an adjudicative capacity. A legislative body, an administrative agency, or another body acts in an adjudicative capacity when, after the presentation of evidence or legal argument by a party or parties, one or more neutral officials will render a proposal for decision or a binding legal order or decision directly affecting a party's or parties' interests in a particular matter.

Comment:

Paragraph (u)

4. The revisions to the definition of the term "tribunal" do not lessen or otherwise impact a lawyer's obligation, as provided in Rule 8.04(a)(3), not to engage in conduct involving dishonesty, fraud, deceit, or misrepresentation.

EX PARTE ISSUES IN THE ADMINISTRATIVE SETTING: OPINION NO. 587 AND PROPOSED CHANGES TO RULE 3.05, TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT

EXHIBIT F

SCHEDULE OF PUBLIC EDUCATION HEARINGS

Proposed Amendments to the Texas Disciplinary Rules of Professional Conduct

The State Bar of Texas Board of Directors is conducting public education hearings on proposed amendments to the Texas Disciplinary Rules of Professional Conduct (TDRPC). To read the proposed amendments as well as interpretive comments to the rules, visit **www.texasbar.com/ethics**. Public education hearings are scheduled around the state.

LUBBOCK
Monday, August 30, noon – 2 p.m.
TEXAS TECH UNIVERSITY SCHOOL OF LAW
LANIER AUDITORIUM, ROOM 153
1802 Hartford Avenue

EL PASO
Tuesday, August 31, noon – 2 p.m.
COMMISSIONERS COURT ROOM, 3RD FLOOR
500 E. San Antonio

HOUSTON
Wednesday, September 1, noon – 2 p.m.
HYATT REGENCY HOUSTON
SANDALWOOD ROOM
1200 Louisiana Street

TYLER
Thursday, September 2, noon – 2 p.m.
TRADITIONS
6205 S. Broadway Avenue

DALLAS
Friday, September 3, noon – 2 p.m.
DALLAS BAR ASSOCIATION
BELO MANSION, WINSTEAD BALLROOM
2101 Ross Avenue

CORPUS CHRISTI
Tuesday, September 7, noon – 2 p.m.
TOWN CLUB
800 N. Shoreline Blvd.
6th floor

MCALLEN
Wednesday, September 8, noon – 2 p.m.
CASA DE PALMAS RENAISSANCE
101 N. Main Street

SAN ANTONIO
Thursday, September 9, noon – 2 p.m.
BEXAR COUNTY COURTHOUSE (OLD COURTHOUSE)
100 Dolorosa

AUSTIN
Friday, September 10, noon – 2 p.m.
TEXAS LAW CENTER
HATTON W. SUMNERS CONFERENCE ROOM
1414 Colorado Street

For more information, contact Ray Cantu at (512) 427-1506 or rcantu@texasbar.com.

7/20/2010

EX PARTE ISSUES IN THE ADMINISTRATIVE SETTING: OPINION NO. 587 AND PROPOSED CHANGES TO RULE 3.05, TEXAS DISCIPLINARY RULES OF PROFESSIONAL CONDUCT

EXHIBIT G

Beal: It isn't ethical to allow an attorney to cheat

ARTICLE COMMENTS

BY RON BEAL
Special to the Star-Telegram

If you are a barber, cosmetologist, accountant, nurse, doctor, engineer or a member of many other professions, you have been licensed by the state of Texas to ensure that you have the education, training and moral character to provide a service to the public.

That is a good thing.

If people licensed by the state violate the law or rules of their profession and cause harm to members of the public, the state can suspend or sanction them and/or revoke their licenses. That is also a good thing. It protects the public and the integrity of their profession.

However, before the state can take one's license away, a person is entitled to a hearing where a decision will be made by the agency board based solely on the evidence submitted at the hearing and the arguments of the licensee and his or her lawyer and the enforcement lawyer seeking to revoke the license. The enforcement lawyer has to prove by a preponderance of the evidence that the law was violated. That is a great thing, for this will prevent arbitrary decisions and prevent baseless claims from threatening one's livelihood.

What if enforcement lawyers could go to the agency board before they filed a complaint, tell the board what they intended to prove and tried to persuade it that the person is guilty? That person, nor his or her

lawyer, would ever be aware of that conversation. Is that fair? Is that consistent with one's guilt or innocence being proven solely by a hearing record?

What if a company wanted to build a coal-burning power plant near your home, or a business wanted to dump chemicals or other toxic materials into the air, land or water near your home? State agencies not only have to decide whether that application is legal under environmental law, but a hearing must be held in which the public can participate to force the company to prove in a record that it is entitled to that license or permit. What if, again, the lawyer for the company could go to the agency board before filing the application and try to convince the board that the application should be granted? You would never be aware of that conversation. Is that fair? Is that consistent with an application being proven solely by a hearing record?

In May 2009, the Ethics Committee of the Texas Supreme Court held under disciplinary rules for lawyers that it was unethical to engage in acts like those set forth above. The committee held that such acts violated the rules and could subject lawyers to sanctions, if not revocation of their licenses. In fall 2009, a committee of the State Bar of Texas recommended to the Texas Supreme Court that the disciplinary rules be changed so such conduct would not be unethical. The State Bar gave no specific reason for the rule change.

In other words, a lawyer could cheat the system by providing evidence and arguments to agency officials outside the record. The lawyer could cheat the other parties' right to challenge all evidence and arguments submitted by the lawyer, for they will never know about it.

Lawyers serve two roles in our adjudicatory system: They are advocates, but also officers of the court. Such acts violate the goal of a fair hearing, and an officer of the court is ethically obligated to uphold the sanctity of that system.

Is there any argument that cheating is ethical? No, and that is exactly why there has been no justification set forth by the State Bar as to why the disciplinary rules should be changed.

The Texas Supreme Court has not objected to the rule change. We Texans need to pay attention to these rule changes, for they can have more effect than a court's written opinions. This rule change is likely to go into effect at the end of the year. Between now and then, Texans should let the Texas Supreme Court know that it is headed in the wrong direction. The court should protect the public from backroom deals and uphold the integrity of our legal administrative system.

RON BEAL IS A PROFESSOR OF LAW AT BAYLOR UNIVERSITY LAW SCHOOL IN WACO.
RON_BEAL@BAYLOR.EDU

Looking for comments?

ENVIRONMENTAL SUPERCONFERENCE: EX PARTE ISSUES IN THE ADMINISTRATIVE SETTING

Opinion No. 587 and Proposed Changes to Rule 3.05, Texas Disciplinary Rules of Professional Conduct

Helen Currie Foster

GRAVES DOUGHERTY HEARON & MOODY

Rule 3.05 Maintaining Impartiality of Tribunal [current form]

A lawyer shall not:

(a) Seek to influence a tribunal concerning a pending manner by means prohibited by law or applicable rules of practice or procedure;

Rule 3.05 cont'd

(b) except as otherwise permitted by law and not prohibited by applicable rules of practice or procedure, communicate or cause another to communicate ex parte with a tribunal for the purpose of influencing that entity or person concerning a pending matter other than:

Rule 3.05 cont'd

(1) In the course of official proceedings in the cause;

(2) In writing if he promptly delivers a copy of the writing to opposing counsel or the adverse part if he is not represented by a lawyer;

(3) Orally upon adequate notice to opposing counsel or to the adverse party if he is not represented by a lawyer.

"Matter" is defined in 1.10(f)

- Does not include rule-making
- Does include any adjudicatory proceeding, application, request for ruling or other determination, contract, claim, controversy, investigation, charge accusation, arrest, or other similar, particular transaction involving a specific party or parties; and any other action covered by conflict of interest rules of the agency

"Tribunal" is defined in Terminology

Any governmental body or official or any other person engaged in a process of resolving a particular dispute or controversy...includes courts and administrative agencies when engaging in adjudicatory or licensing activities, as well as judges, magistrates, special masters, referees, arbitrators, mediators, hearing officers and comparable persons empowered to resolve or to recommend resolution of a particular matter.

"Tribunal" does not include -

- Jurors or prospective jurors
- Legislative bodies or their committees
- Other governmental bodies acting in a legislative or rule-making capacity

Opinion No. 587,

Professional Ethics Committee for the State Bar, May 2009

"A lawyer plans to file a matter with a state administrative agency. Before filing the matter, the lawyer proposes to communicate concerning the matter with persons in the agency for the purpose of ultimately obtaining a favorable decision from the agency."

Opinion's Conclusion:

- If no other applicable laws or rules of procedure prohibit or specifically permit ex parte communications re the matter,
- Rule 3.05 imposes strict limits on lawyer's ex parte communications with decision-maker for the purpose of influencing the decision-maker, and
- These apply before filing if it is reasonably foreseeable that the decision on the matter will be made by the agency.

When does the Opinion say that Rule 3.05 applies?

Prior to the filing of a matter with an agency that is expected to act concerning the matter in a dispute resolution, licensing or adjudicatory capacity, **if the purpose of the ex parte communication is to influence the agency's decision in the matter.**

To whom does the Opinion say the prohibitions apply?

- Does not limit ex parte communications either before or after filing with agency employees who are not the applicable decision maker --
- unless such communications are intended to be **indirect ex parte communications** with the decision maker for the purpose of influencing the outcome of the matter.

Conflict with *Vandygriff*

- *Vandygriff v. First Savings and Loan Ass'n of Borger*, 617 S.W.2d 669 (1981)
  - *HOLDING:* meeting between prospective applicants and commissioner "was not an ex parte communication prohibited by section 17" of APA which "prohibits ex parte communications during pendency of a contested case."
  - "There is no contested case until an application...is filed." *Id.* at 671.

Other Cases

- *Hammack v. Public Utility Com'n of Texas*, 131 S.W.3d 713, 731 (Tex. App. – Austin 2004, pet. denied) (communications between PUC and applicant before filing CCN application were not impermissible ex parte communications, *citing Vandygriff*)
- *Galveston County v. Texas Dept. of Health*, 724 S.W.2d 115 (Tex. App. – Austin 1987, writ ref'd n.r.e.) (pre-hearing communications did not involve any decision-maker assigned to the contested case)

Proposed revision to Rule 3.05

Rule 3.05. Maintaining the Impartiality of a Tribunal

A lawyer shall not:

(a) seek to influence a tribunal concerning a pending matter by means prohibited by law or applicable rules of practice or procedure;

(b) except as otherwise permitted by law and not prohibited by applicable rules of practice or procedure, communicate or cause another to communicate ex parte with a tribunal for the purpose of influencing ~~that entity or person~~ the tribunal concerning a pending matter other than:

(1) in the course of official proceedings in the cause;

(2) in writing if he the lawyer promptly delivers a copy of the writing to opposing counsel or the adverse party if he the adverse party is not represented by a lawyer; or

(3) orally upon adequate notice to opposing counsel or to the adverse party if he the adverse party is not represented by a lawyer.

~~(c) For purposes of this rule:~~

~~(1) "Matter" has the meanings ascribed by it in Rule 1.00(f) of these Rules;~~

~~(2) A matter is "pending" before a particular tribunal either when that entity has been selected to determine the matter or when it is reasonably foreseeable that that entity will be so selected.~~

Terminology: See Rule 1.00 for the definitions of "represents," "tribunal," and "writing."

Proposed revision to "Tribunal"

(u) "Tribunal" denotes ~~any governmental body or official; or any other person engaged in a process~~ of resolving a particular dispute or controversy. "Tribunal" includes such institutions as courts and a court, an arbitrator in a binding arbitration proceeding, or a legislative body, an ~~administrative agencies when engaging in adjudicatory or licensing activities as defined by applicable law or rules of practice or procedure, as well as judges, magistrates, special masters, referees, arbitrators, mediators, hearing officers and comparable persons empowered to resolve or to recommend a resolution of~~agency, or another body acting in an adjudicative capacity. A legislative body, an administrative agency, or another body acts in an adjudicative capacity when, after the presentation of evidence or legal argument by a party or parties, one or more neutral officials will render a proposal for decision or a binding legal order or decision directly affecting a party's or parties' interests in a particular matter~~; but it does not include jurors, prospective jurors, legislative bodies or their committees, members or staffs, nor does it include other governmental bodies when acting in a legislative or rule-making capacity.~~

Timeline

- **May 2009:** Opinion No. 587 issues while State Bar is revising the Texas Rules.
- **October 20, 2009:** Supreme Court issues initially proposed amendments and seeks public comment by December 31, 2009.
- **December 30, 2009:** Administrative lawyer group submits Request for Reconsideration to Professional Ethics Committee.
- **April 14, 2010:** Supreme Court issues revised proposed amendments.

Timeline cont'd

- **May 20, 2010:** PEC denies reconsideration, will consider clarification.
- **July 7, 2010:** Supreme Court issues proposed Comments.
- **August 30-September 10:** 9 public hearings set by State Bar.
- **October 6, 2010:** State Bar to respond to Court
- **Nov.-Dec. 2010:** referenda on proposed rules and comments?

Hearing Schedule

The State Bar of Texas Board of Directors is conducting public education hearings on proposed amendments to the Texas Disciplinary Rules of Professional Conduct (TDRPC). To read the proposed amendments as well as interpretive comments to the rules, visit **www.texasbar.com/ethics**. Public education hearings are scheduled around the state.

August 30 – Lubbock
August 31 – El Paso
Sept. 1 – Houston
Sept. 2 – Tyler
Sept. 3 – Dallas
Sept. 7 – Corpus Christi
Sept. 8 – McAllen
Sept. 9 – San Antonio
Sept. 10 - Austin

Current options? Wait for -

- "Clarification" by Professional Ethics Committee?
- Legislative action?
- Rulemaking by agencies?
- Attorney General opinion?
- Rule changes?
- Declaratory judgment action?

Risks of ex parte contact

- **Risks to lawyer:** disciplinary action, such as grievance with investigation and possible sanctions, based on interpretations in Opinion No. 587
- **Risks to client:** *Lewis v. Guaranty Federal Savings and Loan Ass'n*, 483 S.W.2d 837 (Tex. Civ. App. – Austin 1972, writ ref'd n.r.e.) (applicant's charter voided)

DEBATE CONTINUES....

On Opinion No. 587 and Proposed Changes to Rule 3.05, Texas Disciplinary Rules of Professional Conduct

Helen Currie Foster

GRAVES DOUGHERTY HEARON & MOODY

CHARLES HERRING, JR.

HERRING & IRWIN, L.L.P.
701 Brazos Street, Suite 650
Austin, Texas 78701
(512) 320-0665
(512) 320-0931

Education:

B.A. with Highest Honors, University of Texas (1972).

J.D. with Honors, University of Texas School of Law (1975).

Professional Memberships:

Chairman, Texas Supreme Court Task Force on Sanctions (1991-96).

Member, Texas Supreme Court Advisory Committee (1988-99).

Member, Texas Supreme Court Grievance Oversight Committee (2010-present).

Chairman, Trial Subcommittee, Judicial Improvements Act Western District Advisory Committee, United States District Court (1990-93).

Chairman, State Bar of Texas Committee for the Prevention of Legal Malpractice (1995-96; Presidential Citation).

Member, Committee on Court Administration, United States District Court, Western District of Texas (1985-97).

Member, State Bar of Texas Task Force on Malpractice Insurance Disclosure (2007-2008).

Member, Legal Services to the Poor in Civil Matters Committee of the State Bar of Texas (2001-present).

Recipient, First Annual Professionalism Award from the Texas Center for Legal Ethics and Professionalism and the Travis County Bar Association (2000).

Instructor, Texas Center for Legal Ethics and Professionalism (2009-present).

Examiner, American Bar Association Standing Committee on Legal Specialization, Lawyer Liability Examination (2002).

Columnist and Member, Board of Contributors, Texas Lawyer (1990-94).

Fellow, Texas Bar Foundation.

Member, State Bar of Texas Committee on the Administration of Rules of Evidence (1991-93); Member, Travis County and American Bar Associations; Association of Trial Lawyers of America.

Member, Texas Center for Legal Ethics and Professionalism, Malpractice and Grievance Prevention Task Force (1994-95).

Employment

Briefing Attorney, United States District Judge Owen D. Cox, Corpus Christi, Texas (1975-76).

Gochman & Weir: San Antonio, Texas (1976-81). Partner, 1979-81.

Small, Craig & Werkenthin: Austin, Texas (1981-89). Partner, 1982; head of 23-member litigation group, 1983-89.

Jones, Day, Reavis & Pogue: Austin, Texas (1989-94). Partner.

Law Offices of Charles Herring, Jr. & Associates, 1002 West Avenue, Suite 200, Austin, Texas (1994-9/97).

Herring & Irwin, L.L.P., 701 Brazos Street, Suite 650, Austin, Texas (9/97-present).

Publications

Books

Author, *Texas Legal Malpractice & Lawyer Discipline* (American Lawyer Media, L.P. 1991; rev. eds. 1997, 2002, 2004-2010).

Co-Author, *Handbook on Texas Discovery Practice: The New Rules Governing Discovery* (West Group 1999; rev. eds. 2000-2009).

Author, The Texas Lawyer's Creed -- Avoiding Pitfalls in Pretrial Discovery, in TEXAS TORTS AND REMEDIES (1991) at 101-85.

Author, Potential Pitfalls for Sealing of Court Records Under Rule 76a of the Texas Rules of Civil Procedure, in TEXAS TORTS AND REMEDIES (1991) at 101-93.

Articles

Author, Motions to Compel, Discovery Sanctions, and Ethical Considerations in Discovery, Advanced Evidence & Discovery Law Course, State Bar of Texas, April - May, 2009.

Author, Year End Review 2008 – Substantive Law: Legal Malpractice: Arbitration and Self Interest, Texas Lawyer, December 22, 2008.

Author, Discovery Sanctions and Ethical Considerations in Discovery, Advanced Evidence & Discovery Law Course, State Bar of Texas, April - May, 2008.

Author, Ethical Issues in Jay Brandon's "Executive Privilege," Travis County Women Lawyers Association, July, 2007.

Author, Discovery Sanctions and Ethical Considerations in Discovery, Advanced Evidence & Discovery Law Course, State Bar of Texas, April - May, 2007.

Author, Discovery Sanctions and Ethical Considerations in Discovery, Advanced Evidence & Discovery Law Course, State Bar of Texas, April - May, 2006.

Author, Legal Malpractice in Texas – Recent Developments, 21st Annual Advanced Personal Injury Law Course, State Bar of Texas, July and August, 2005.

Author, The Restatement of the Law Governing Lawyers: An Overview and Recent Texas Case Law, Annual Legal Ethics Committee Seminar, Dallas Bar Association, April 10, 2003.

Author, Client Conflicts, Texas Disciplinary System: Lawyer Regulation in Texas–2000 Style, Texas Center for Legal Ethics and Professionalism, November 17, 2000.

Co-Author with Tim Sims, Claims Against Lawyers for Negligent Misrepresentation and Failure to Warn, Advanced Oil, Gas and Mineral Law 1999, State Bar of Texas, September 23-24, 1999.

Co-Author with Ron Moss, Avoiding Pre-Trial Sanctions Including Discovery and Spoliation of Evidence, 20th Annual Advanced Civil Trial Course, State Bar of Texas, 1997.

Author, Managing Conflicts of Interests as a Source of Malpractice Claims, Key Turning Points in Preventing The Legal Malpractice and Ethics Actions, Attorney' Advantage Seminar, May 21, 1997.

Author, The Rules: An Overview of the Law, in Recognizing and Resolving Conflicts of Interest, State Bar of Texas, May 9 and 16, 1997.

Author, Ethical Considerations in Federal Court Trial Practice, Austin Chapter Federal Bar Association, March 26, 1997.

Author, Managing Conflicts of Interest as a Source of Malpractice Claims, Key Turning Points in Preventing the Legal Malpractice and Ethics Actions, Attorneys' Advantage Seminar, September 10 & 11, 1996.

Co-Author with Ron Moss, Legal Malpractice and Ethical Considerations for Appellate Lawyers, Travis County Bar Association, Primer for Handling Civil Appeals, 1996.

Co-Author with Ron Moss, Sanctions, Advanced Personal Injury Law Course, State Bar of Texas, 1996.

Author, Is the Big Firms' Free Pass Gone?, Texas Lawyer, p. 30, April 22, 1996.

Author, Outside Contractors and Client Confidentiality, Texas Lawyer, p. 24, January 8, 1996.

Author, Lessons from 'Rainmaker': What Not to Do, Texas Lawyer, p. 26, October 30, 1995.

Co-Author with Ron Moss, Sanctions and Liability, Eleventh Annual Advanced Personal Injury Law Course, State Bar of Texas, June, July, August 1995.

Author, Migratory Fouls and Chinese Walls, Texas Lawyer, p. 20, April 10, 1995.

Co-Author with Ron Moss, Discovery Sanctions, Advanced Civil Trial Short Course, SMU School of Law, April 6-7, 1995.

Author, Lost and Found: Inadvertent Disclosures and Unauthorized Transmissions, Texas Lawyer, p. 16, December 12, 1994.

Author, The Guilty-Party Conflict in Sanctions Practice, Texas Lawyer, p. 22, August 29, 1994.

Co-Author with Ron H. Moss, Discovery Sanctions, Seventeenth Annual Advanced Civil Trial Course, State Bar of Texas, August, September, and October, 1994.

Author, Limits on Fee Creativity, Commentary, Texas Lawyer, p. 16, June 27, 1994.

Co-Author with Ron H. Moss, Discovery Sanctions, Advanced Civil Trial Short Course, SMU School of Law, April and May, 1994.

Co-Author with John F. Sutton, Jr., Disqualifying Lawyers: The Task Force Speaks, Texas Lawyer, March 8, 1993 at 14.

Author, Reforming Texas Sanctions Practice, Texas Lawyer, January 25, 1993 at 10.

Author, Ethical Considerations in the Discovery and Trial of Business Cases, University of Houston Seminar, September 1992.

Author, Legal Malpractice and Ethical Considerations for Appellate Lawyers, State Bar of Texas, Sixth Annual Advanced Civil Appellate Practice Course, Sept. 1992.

Co-Author, Federal and State Juror Profiles in Austin, Austin Lawyer's Magazine, Vol. 1, Spring 1992.

Author, Ethical Considerations in the Use and Presentation of Evidence, University of Houston Seminar, April 1992.

Author, Results of Sanctions Task Force Questionnaire, Texas Lawyer, February 24, 1992 at 10.

Author, Task Force on Sanctions Questionnaire, Texas Lawyer, December 16, 1991 at 12.

Author, Ethical Considerations in the Discovery and Trial of Business Cases, Advanced Business Litigation Seminar, University of Houston, Dec. 1991.

Author, Special Disciplinary Hazards for Trial Lawyers, State Bar of Texas, Fourteenth Annual Advanced Civil Trial Course, Sept. 1991.

Author, The Rise of the 'Sanctions Tort,' Texas Lawyer, January 28, 1991 at 22.

Author, Avoiding Malpractice and Ethical Violations in Litigation: How Not to Lose Your License, Your Money and Your Clients, Travis County Bar Association, Legal Malpractice Seminar, December 1990.

Editor, Travis County Trial Reports (1982-1994).

Author, Pretrial Discovery in Texas - Recent Developments and Basic Procedures, Travis County Bar Association and Austin Young Lawyers Association, Litigation and Trial Tactics Seminar, January 1990.

Author, Rattlesnakes and the Other Fellows: Legal Malpractice Pitfalls for Litigators, 23 Trial Lawyers Forum, No. 5 at 5 (l989).

Author, Scaling the Tower of Babel: Uniformity and Local Court Rules, 4 Texas Lawyer, Feb. 27, 1989 at 21.

Author, Travis County Civil Jury Trial Docket: Six Years' Experience in Our District Courts, 10 Austin Lawyers Journal, Jan. 1989 at 1.

Co-author (with Chief Justice Bob Shannon, 3d Court of Appeals), Temporary Restraining Orders and Temporary Injunctions in Texas -- A Ten-Year Survey of Practice and Procedure, 17 ST. MARY'S L.J. 689 (1986).

Author, Federal Court Nondiscovery Motions, TRO's and Preliminary Injunctions, State Bar of Texas Videotape Series (1985).

Author, New Venue Procedure, 46 TEX. B.J. 1300 (1983).

Author, Federal Magistrates in Texas, 12 Trial Lawyers Forum, at 11 (1977).

Proposed Disciplinary Rule Amendments: *Key Issues*

Charles Herring
Herring & Irwin, L.L.P.
Austin, Texas

Background

- ABA 2002 amendments Model Rules
- Texas Supreme Court: Task Force 2003
- State Bar Committee
- Conference Committee
- S Ct proposals: 10/20/09; 4/14/10
- Comments issued 7/7/10
- No Preamble issued yet

Proposed Amendments

- 5 new rules
- New definitional rule: affects all rules
- SBOT to comment on proposals by 10/6/10
- Referendum – late 2010, early 2011

Proposed Amendments: New Rules

- Sex with clients – R 1.13
- Clients with diminished capacity – R 1.14 (replacing R 1.02(g))
- Duties to prospective client – R 1.17
- Law reform activities that may affect client interests – R 6.03
- Definitions – R 1.00

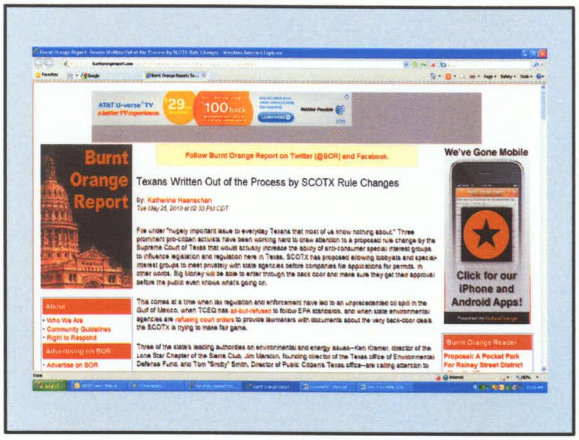
What will these changes cost?

85,000 lawyers x 4 hours x $250 = $85 million??

- Reading, analysis, study, practice modifications re: confidentiality, conflicts of interest, disqualification, fees—& sex lives

Rule 3.05 – ex parte contacts

"A matter is 'pending' before a particular tribunal either when that entity has been so selected to determine the matter or ***when it is reasonably foreseeable*** that that entity will be so selected."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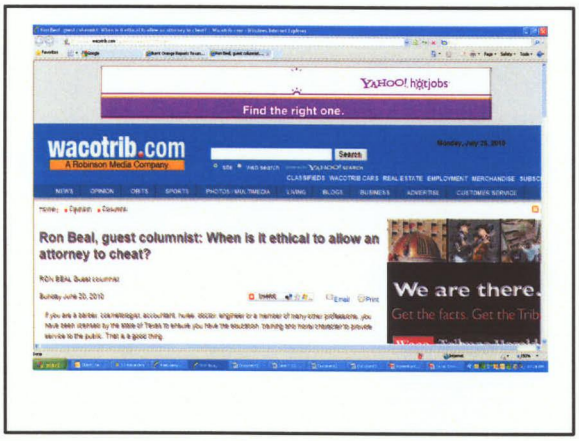
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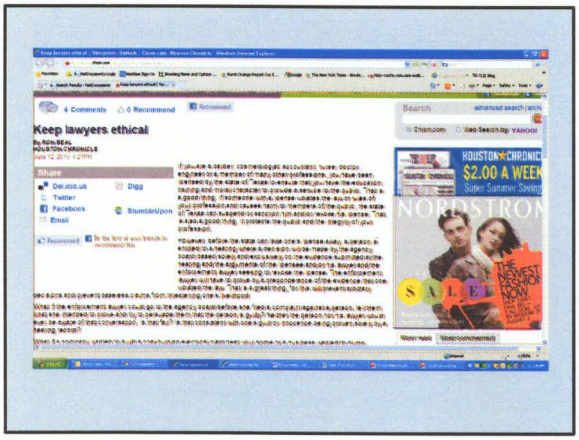
wacotrib.com
A Robinson Media Company
Ron Beal, guest columnist: When is it ethical to allow an attorney to cheat?
We are there.


Keep lawyers ethical
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Keep lawyers ethical

By RON BEAL
HOUSTON CHRONICLE
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"What if a company wanted to build a coal-burning electrical plant near your home or a business wanted to dump chemicals or other toxic materials into the air, land or water near your home? ... What if ... the lawyer for the company could go to the agency board before filing the application and try to convince them the application should be granted? ...

Keep lawyers ethical (cont.)

"... You would never be aware of that conversation. Is that fair? Is that consistent with an application being proven solely by a hearing record?"

Tx Code of Judicial Conduct

Canon 3B(8):

"A judge shall not ... permit ... *ex parte* communications ... concerning the merits of a pending or *impending* judicial proceeding."

Sex With Clients

Proposed Amendments – Sex With Clients

New R 1.13

- **Atty shall not condition representation/quality on sex**
- **Not solicit/accept sex for fees**
  - ***What about expenses?***

Proposed Amendments - Sex

- **Atty must not have sex with a client the atty *"personally represents"* unless (1) married, (2) ongoing consensual sex that began before representation**
- ***Date-before-sex rule?***
- ***Transfer representation to a partner or associate ok? Anti-solo rule?***

Sex: organizational clients

Cmt. 6: "client" includes a person who:

- oversees the representation, or
- instructs the lawyer on behalf of the organization

In re: Inglimo,

740 N.W.2d 125 (Wis. 2007)

- "Counts 1 and 2 relate to Attorney Inglimo's representation of [client, LK] in a criminal case .... Inglimo had sexual relations with LK's girlfriend in LK's presence and with LK also engaging in sexual relations with his girlfriend during the sexual encounter."
- Held: No evidence Inglimo had sex "with" his client. (!)

Definitions

Definitions

R 1.00 – moved from Preamble

- "Informed consent":

  Client agrees to a course of conduct after atty explains sufficiently for client to understand "the material risks and reasonably available alternatives"

Definitions

"Confirmed in writing":

- Re: informed consent:

  "provided in writing" by the person, or by the lawyer
- Promptly transmitted when client consents, or if that's not reasonable, within a reasonable time

Definitions

"Affiliated" – a lawyer is affiliated if:

- a shareholder, partner, member, etc.
- "any other relationship" providing "access to the confidences of the firm's clients that is comparable" to that "typically afforded" firm members
- *How much "access"? Some confidences? All? One file? One subset of files?*

"Affiliated" (cont.)

E.g.s:

Cmt. 1: "may not" be affiliated: "outside counsel with expertise in a particular area of the law or in dealing with a particular government entity," attys in another state advising about that state's laws, local counsel, temporary attys

-*What if they have "comparable access"?*

"Affiliated" (cont.)

E.g.s:

Cmt. 2: "may" be affiliated: of-counsel; senior lawyers, contract lawyers, part-time lawyers

Confidentiality

Confidentiality: R 1.05

- New definition of "confidential information": "all information relating to representation of the client" from any source

Confidentiality: R 1.05

Exceptions:

- What is "generally known"
- What is "readily obtainable from sources generally available to the public."
  - *–Internet-based definition of confidentiality? Changeable daily?*

Confidentiality: R 1.05

For prospective client, confidentiality for info furnished "by" the prospective client

- But cmt. 4 says info furnished "directly or through an agent"

Confidentiality: R 1.05

Cmt. 4: info for a prospective client is not confidential if furnished from "other lawyers working on similar matters ... for other parties"

- ***But what if a joint-defense agreement exists with a confidentiality obligation?***

Conflicts of Interest

Conflicts of Interest: R 1.06

Rule 1.06

- Close to ABA Model Rule
- Defines "conflict of interest"
- Incorporates R 1.07

Conflicts of Interest: R 1.06

Rule 1.06 – "conflict of interest"

- Lacks an express prohibition on conflicted representation
- Conflict of interest: (1) the representation of one client will be directly adverse to another, or

Conflicts of Interest: R 1.06

(2) significant risk exists that client's representation will be limited by responsibilities to another client/former client, 3rd person, or personal interest of lawyer

Conflicts of Interest: R 1.06

Apart from representing opposing parties in the same matter, may represent a client when a conflict of interest exists, if

(1) lawyer reasonably believes able to provide competent/diligent representation, and

Conflicts of Interest: R 1.06

(2) representation complies with R 1.07, and

(3) client gives "informed consent, confirmed in writing" [risks/alternatives]

Conflicts of Interest: R 1.06

Imputed disqualification: applies to "affiliated" lawyers who "know or reasonably should know" of the prohibition

- *When is it reasonable to not know of affiliated counsel's disqualifying conflict of interest?*

Conflicts of Interest: R 1.07

Rule 1.07

- Applies to all concurrent representation—co-party representation—not just lawyers acting as intermediaries
- Litigators & transactional lawyers

Conflicts of Interest: R 1.07

- Requires R 1.06 compliance
- Requires atty's "reasonable belief" on 4 points before representation
- Requires 4 disclosures
- Requires each client's informed consent, confirmed in writing

Conflicts of Interest: R 1.07

Why have R 1.07?

- *ABA eliminated its corresponding rule*
- *R 1.07 has required beliefs and disclosures, but also requires compliance with all R 1.06 requirements—which include informing clients of all "material risks."*
  - *Which R 1.07 disclosure would not be a "material risk"?*
  - *If it's not a "material risk," why disclose it?*

Conflicts of Interest: R 1.07

Required "reasonable beliefs":

1. Clients can "agree among themselves to a resolution of any material issue concerning the matter"
   - How to know that in advance??

Conflicts of Interest: R 1.07

2. Each client is capable of understanding what is in that client's best interest and making informed decisions
3. Lawyer can be impartial with each

Conflicts of Interest: R 1.07

4. The representation is unlikely to result in material prejudice to a client's interest
   - *–Beliefs subject to 20/20 hindsight challenges?*

Conflicts of Interest: R 1.07

Required disclosures before representation (or as soon as practicable):

1. Cannot advocate for one client over another, and therefore

Conflicts of Interest: R 1.07

(A) each client "must be willing to make independent decisions without the lawyer's advice to resolve issues among the client concerning the matter";

-Settlement factors advice?

Conflicts of Interest: R 1.07

(B) events might require lawyer to withdraw before the matter ends

*Must confirm in writing the client's informed consent

Conflicts of Interest: R 1.07

Cmt. 13: additional disclosures to consider:

- The effect of co-representation on confidentiality and disclosure duties
- Joint representation may be *more* expensive
  - *When is it more expensive to have one attorney for multiple clients than to have multiple lawyers?*

Conflicts of Interest: R 1.07

Imputed disqualification:

If one lawyer is personally prohibited, so is an "affiliated" lawyer who "knows or reasonably should know" of the prohibition

-When is it reasonable not to know that?

Prospective Clients

Prospective Clients

R 1.17

- **Only a "prospective client" if discuss retention "in good faith"**
- **Atty must not disclose confidential info <u>except</u> per R 1.05 or (d)(2)**
- **Must avoid conflicts – becoming materially adverse**

Prospective Clients

R 1.17

- May undertake adverse representation if:

  1. obtain informed consent, confirmed in writing, to the representation; or

Prospective Clients

2. "condition" discussion on client's informed consent that no info disclosed will be confidential or prohibit the lawyer from assuming adverse representation.

- E.g., "beauty contest"

Fees & Expenses

Fees: R 1.04

- Supposedly more client-protective than current rule
- But prohibits "clearly excessive" fees = a "reasonable lawyer," after a review of the facts, would have a "firm belief or conviction" the fee is "in excess of a reasonable fee"

Fees: R 1.04

- *Fees "believed" unreasonable, but not "firmly believed" are really ok?*
- No prohibition on unreasonable *expenses*
  - –ABA MR 1.5(a) prohibits "unreasonable fee" or "expenses"

Fees: R 1.04

- Must communicate any change in fee/expense rate
  - –*How? Month-to-month billing? Note on bill? Letter?*
- Contingent fee K signed by client
  - –v. Gov't Code § 82.065: signed by client and atty, or else voidable

Organization as Client

Organization as client: R 1.12

- Atty represents org., shall proceed in its "best legal interest"
- Explain organizational representation to avoid constituent's misunderstanding, or if org. and constituent are adverse
- If jointly represent org. & constituent, must comply with R 1.07

Organization as client: R 1.12

Atty shall take remedial action if info clearly establishes:

1. constituent's violation of legal obligation to org. or legal violation imputable to org.
2. likely to substantially injure org.
3. re: a matter w/in scope of rep. of org.

Organization as client: R 1.12

Remedial actions include:

- asking for reconsideration
- advising to obtain a separate legal opinion
- referring to the higher/highest authority
- disclosing info per R 1.05 (e.g., to prevent client's crime or fraud)

Organization as client: R 1.12

- Termination or withdrawal ends the atty's obligation to take remedial action

Organization as client: R 1.12

Omitted: ABA "reporting out":

- ABA MR permits lawyer, if remediation fails, and if a clear violation of law is reasonably certain to substantially injure org., to disclose info (regardless of confidentiality rule) as atty reasonably believes necessary to prevent substantial injury to org.

Organization as client: R 1.12

Omitted: ABA "noisy withdrawal"

- If an atty discharged for exercising those duties, then noisy withdrawal: make sure highest authority is aware of discharge

Prohibited Transactions

Prohibited Transactions: R 1.08

Business transaction with client

R 1.08(a):

1. [change:] lawyer need only "reasonably believe" the terms of the transaction are fair and reasonable to the client

Prohibited Transactions: R 1.08

2. client must provide informed consent, confirmed in a writing ***signed by the client***, to material terms & lawyer's role, including whether lawyer represents the client in the transaction

Prohibited Transactions: R 1.08

3. lawyer must advise client of desirability of seeking independent legal advice, and give an opportunity to do so

Prohibited Transactions: R 1.08

Comment 3:

R 1.08(a) doesn't apply to "ordinary fee agreements," but "it ***may apply*** to a modified fee agreement" during the representation

- *"May"? When does it?*

Prohibited Transactions: R 1.08

Comment 3:

R 1.08(a) "typically" will apply if lawyer's fee includes an interest in client's business or other "nonmonetary property"

Prohibited Transactions: R 1.08

Rule 1.08(b) – gifts from a client

- Soliciting gifts to the lawyer or a person related to the lawyer is ok, *if* the client is a related person

Prohibited Transactions: R 1.08

Related persons include: an "individual with whom the lawyer or ... client maintains a *close, familial relationship*."

Prohibited Transactions: R 1.08

- Gifts from a client who is the lawyer's gay/lesbian life partner?
- Gifts from a client to lawyer's son/daughter who is the client's life partner?

Prohibited Transactions: R 1.08

R 1.08(g): agreements prospectively limiting the lawyer's liability to a client (if client has independent counsel)

- Would include both malpractice and "professional misconduct"

Prohibited Transactions: R 1.08

TRDP 1.06V definition: "Professional Misconduct":

- Includes an atty's violations of disciplinary rules
- Barratry
- Intentional & Serious Crimes

Prohibited Transactions: R 1.08

R 1.08(g)(3): settlement of claim or potential claim – also includes "professional misconduct"

Prohibited Transactions: R 1.08

R 1.08(g)(2): permits <u>binding arbitration agreements</u> if:

(1)Client represented by independent counsel, or

(2)Lawyer discloses: scope of issues; waiver of jury/judge trial; limited rights of appeal

Prohibited Transactions: R 1.08

Less client protections than PEC Op. 586:

1. Prohibits "clearly unfair terms" (e.g., lawyer alone selects arbitrator; remote location; excessive costs)

Prohibited Transactions: R 1.08

2. Disclose all "significant" advantages, disadvantages
- Mentions e.g.:
  - –possibly reduced discovery
  - –relaxed evidentiary rules
  - –private v. public trial
  - –obligation to pay arb. fees/costs

Miscellaneous

Supervisory lawyer: R 5.01

- Limits required remedial actions when know of a supervised lawyer's rule violation to actions within the scope of authority
- Still omits ABA reasonable-efforts requirement to ensure firm procedures to comply with rules

Safekeeping Property: R 1.15

- Modified from 10/09 proposal: duty to notify third person of receipt of property, but only "such property the lawyer ***knows belongs*** to the third person"
- But duty to distribute to client or third person prop. "entitled to"

Safekeeping Property: R 1.15

- Duty to retain disputed funds, unless lawyer "reasonably believes" claim is invalid
- Unearned fees/advanced expenses deposited in client trust account

Candor to Tribunal: R 3.03

Changes:

- Must correct a false statement of material fact or law made to a tribunal by the lawyer
- May refuse to offer/use evidence the lawyer reasonably believes is false (except criminal cases)

Candor to Tribunal: R 3.03

Changes:

- If lawyer knows a person intends to engage in criminal or fraudulent conduct related to an adjudicatory proceeding, must take reasonable remedial measures, including, if necessary, disclosure to tribunal

Reporting misconduct: R 8.03

- Lawyer shall not agree or assist in agreement to restrict the duty to report misconduct
- W/in 30 days of finding of guilt or deferred adjudication for Intentional or Serious Crime, lawyer must self-report to CDC