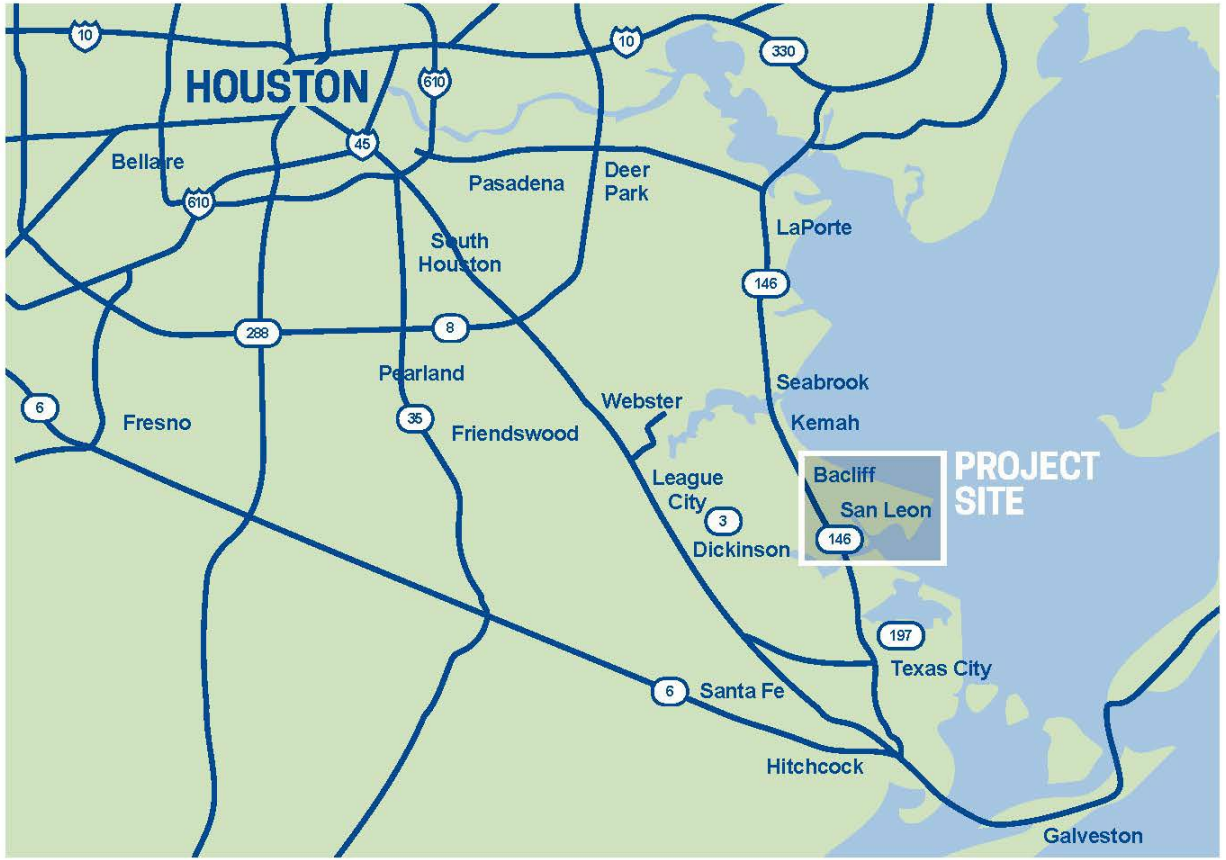
Bayshore Desalination Facility

Texas City

August 2026

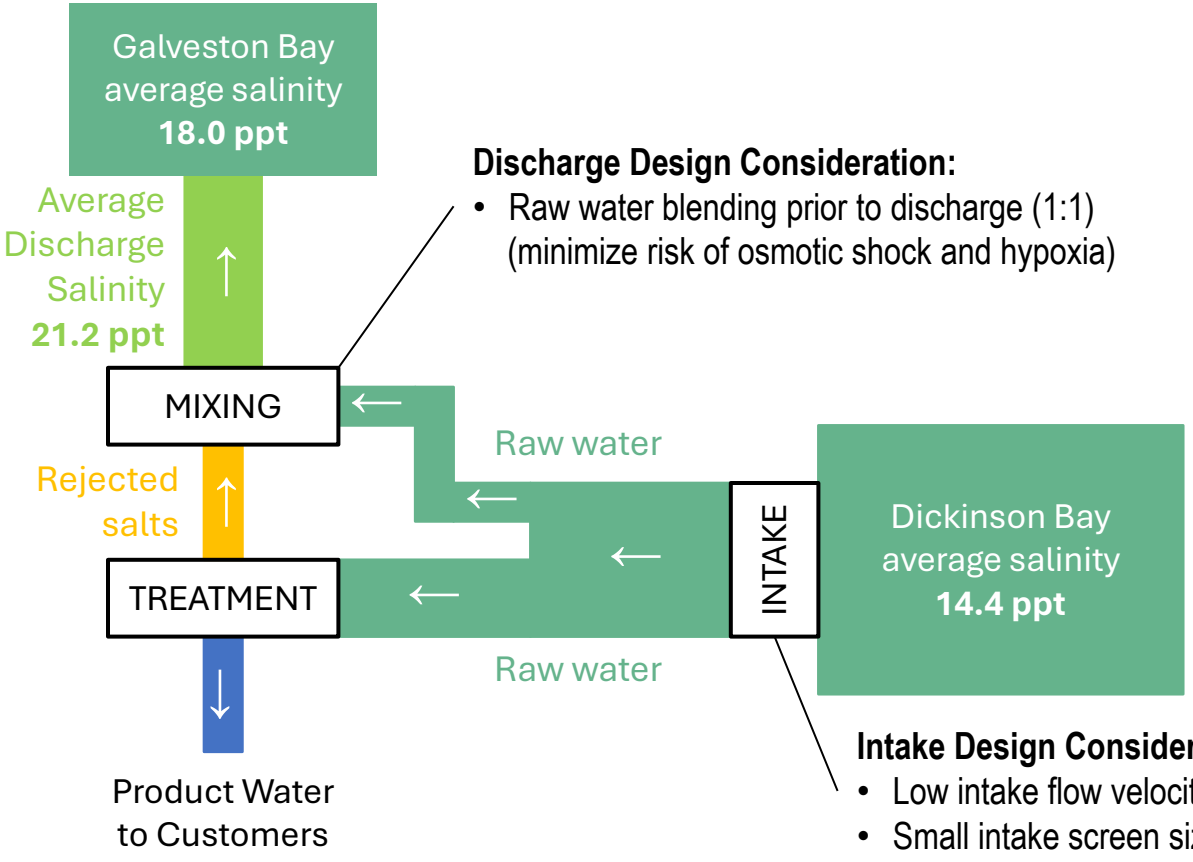
Project Location



Site History

- **1966** – HL&P built the P.H. Robinson Power Plant using seawater for cooling.
- **2008** – Power plant decommissioned.
- **2024** – EPCOR begins studying the potential for developing a seawater desalination project.
- **2025** – EPCOR submitted a discharge permit application to TCEQ for a 26.5 MGD desalination facility.

Design Approach



Discharge Design Consideration:

- Raw water blending prior to discharge (1:1) (minimize risk of osmotic shock and hypoxia)

Intake Design Consideration:

- Low intake flow velocity (minimize risk of impingement)
- Small intake screen size (minimize risk of entrainment)

Intake

Intake Design Considerations

Objective is to minimize the risk of impingement and entrainment of aquatic organisms.

	Former P.H. Robinson Power Plant	Proposed **Bayshore Desalination Facility**
Average Intake Volume	~1,200 MGD	**83 MGD**
Flow Velocity (risk of impingement)	~2.5 feet per second	**0.5 feet per second**
Screen Size (risk of entrainment)	~15 mm	**1 mm**

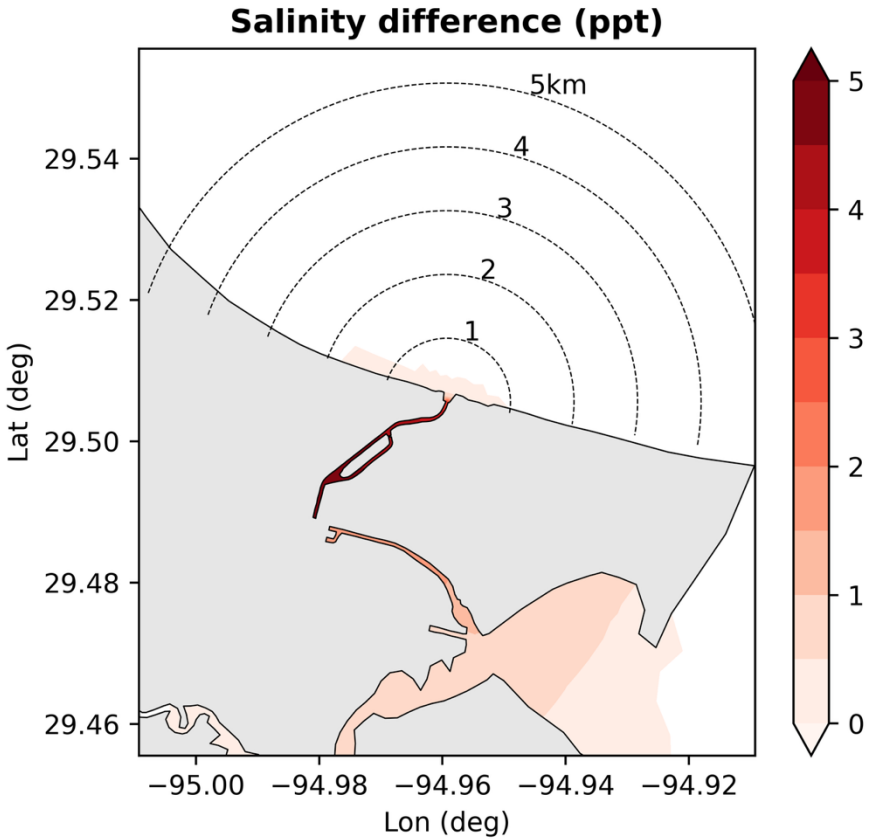
Discharge

TEXAS A&M UNIVERSITY
GALVESTON CAMPUS

Key Findings by Texas A&M-Galveston

Project intake and discharge assumptions for 26.5 MGD were included in an existing bay-wide circulation model:

- **Relatively small salinity impacts, generally less than 1 ppt in both intake and discharge regions**
- **No significant increase in the risk of hypoxia**



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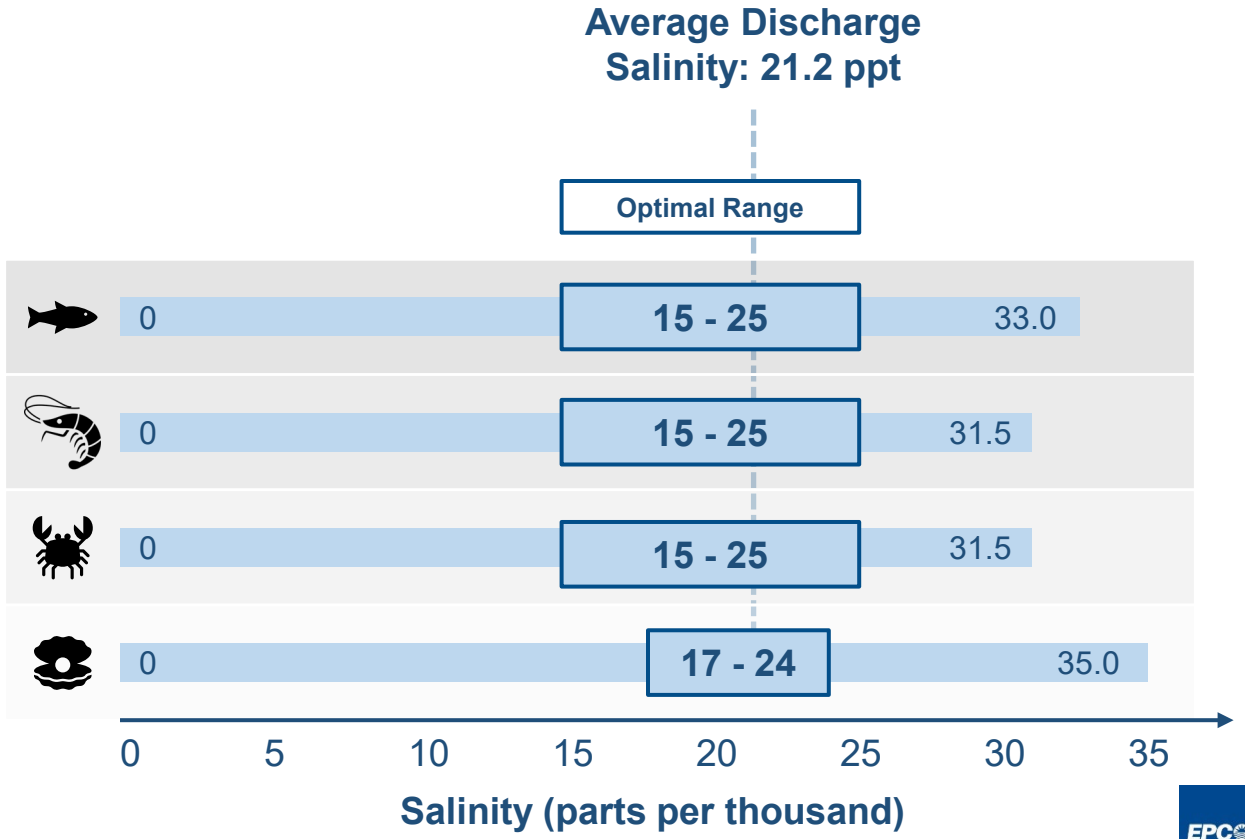
Discharge

TEXAS A&M UNIVERSITY
GALVESTON CAMPUS

Key Findings by Texas A&M-Galveston

For important species in Galveston Bay:

- Species tolerate a wide range of salinity
- **Optimal salinity range for larval recruitment** is generally 15-25 ppt
- Average discharge salinity from Project (21.2 ppt) falls within optimal range



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Next Steps

2026	○ TCEQ Draft Discharge Permit for review and public comment
~2028	○ Begin construction
~2031	○ Begin operation

Thank You

Scan here to learn more:

BayshoreWaterTX.com

TCEQ Application:
http://www.tceq.texas.gov/goto/cid
Permit #WQ0005502000

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