# Bayshore Desalination Facility

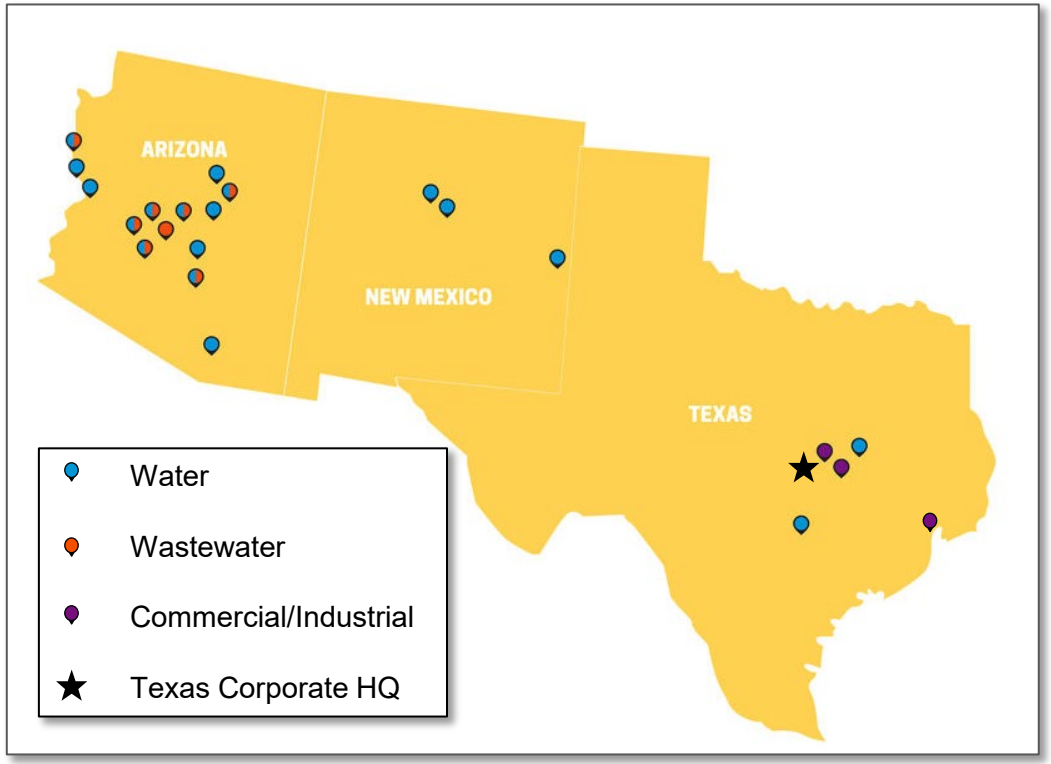
## Texas City

**“Water for the Future”**
Jan. 2026

Former P.H. Robinson Power Plant site (center) looking north, showing Intake Channel (right), Outfall Channel (left) and Galveston Bay (horizon)

EPCOR

# U.S. Operations Footprint

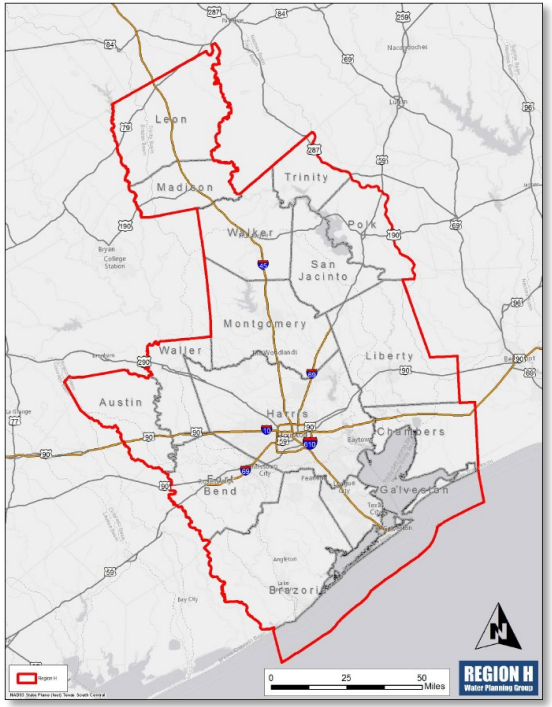



- Over 130 years delivering safe, reliable utility service
- 2 million+ customers across North America
- 600+ U.S.-based employees
- One of the largest regulated private water utilities in the U.S. Southwest

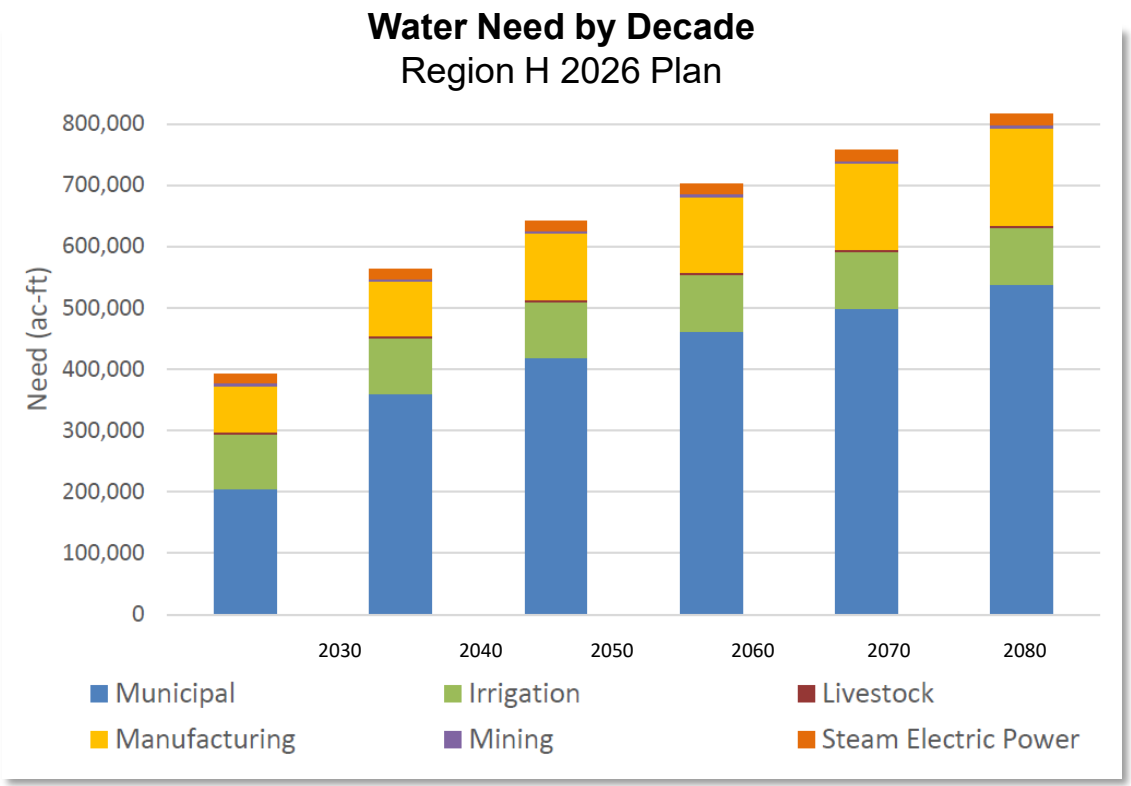
# AGENDA

- ❑ Project Overview
- ❑ Permitting Timeline
- ❑ Operations and Performance
- ❑ Questions and Answers

# How Much New Water Supply is Needed?




**Region H includes 15 counties, 3 major rivers and >7 million residents**

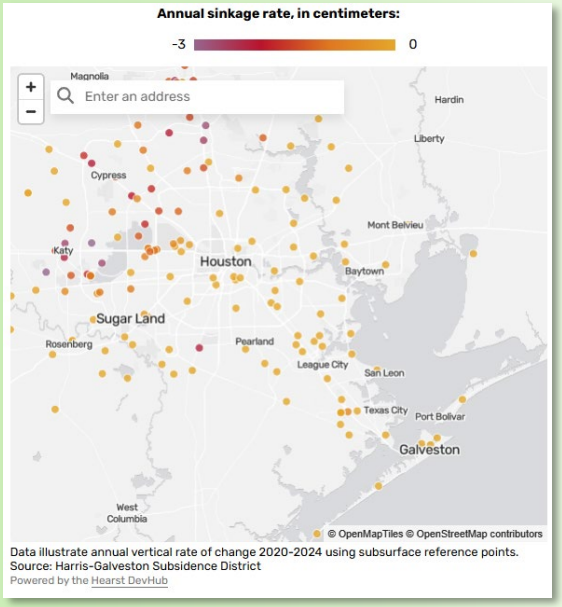



***1 acre foot = 325,851 gallons***

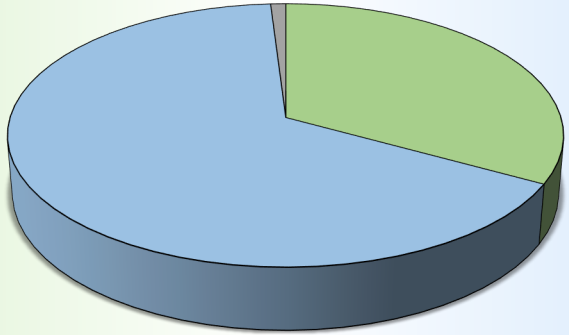
# Water Supply Options

## Groundwater

Limited by land subsidence



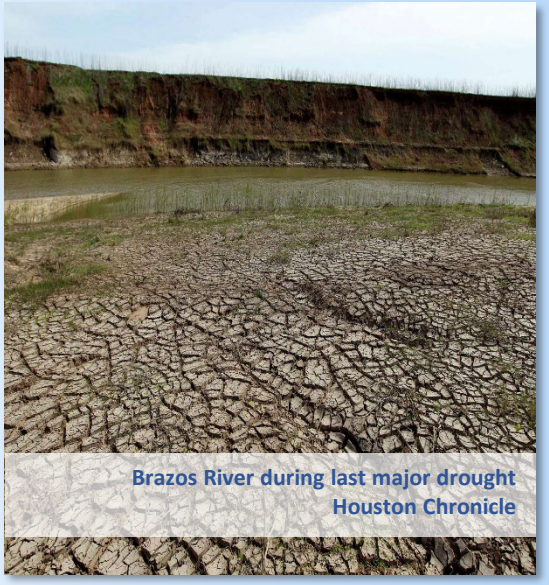

Current sources of Region H water supply:



- Groundwater
- Surface Water
- Other

## Surface Water

Limited by drought and upstream use



Brazos River during last major drought
Houston Chronicle

EPCOR

PROJECT OVERVIEW

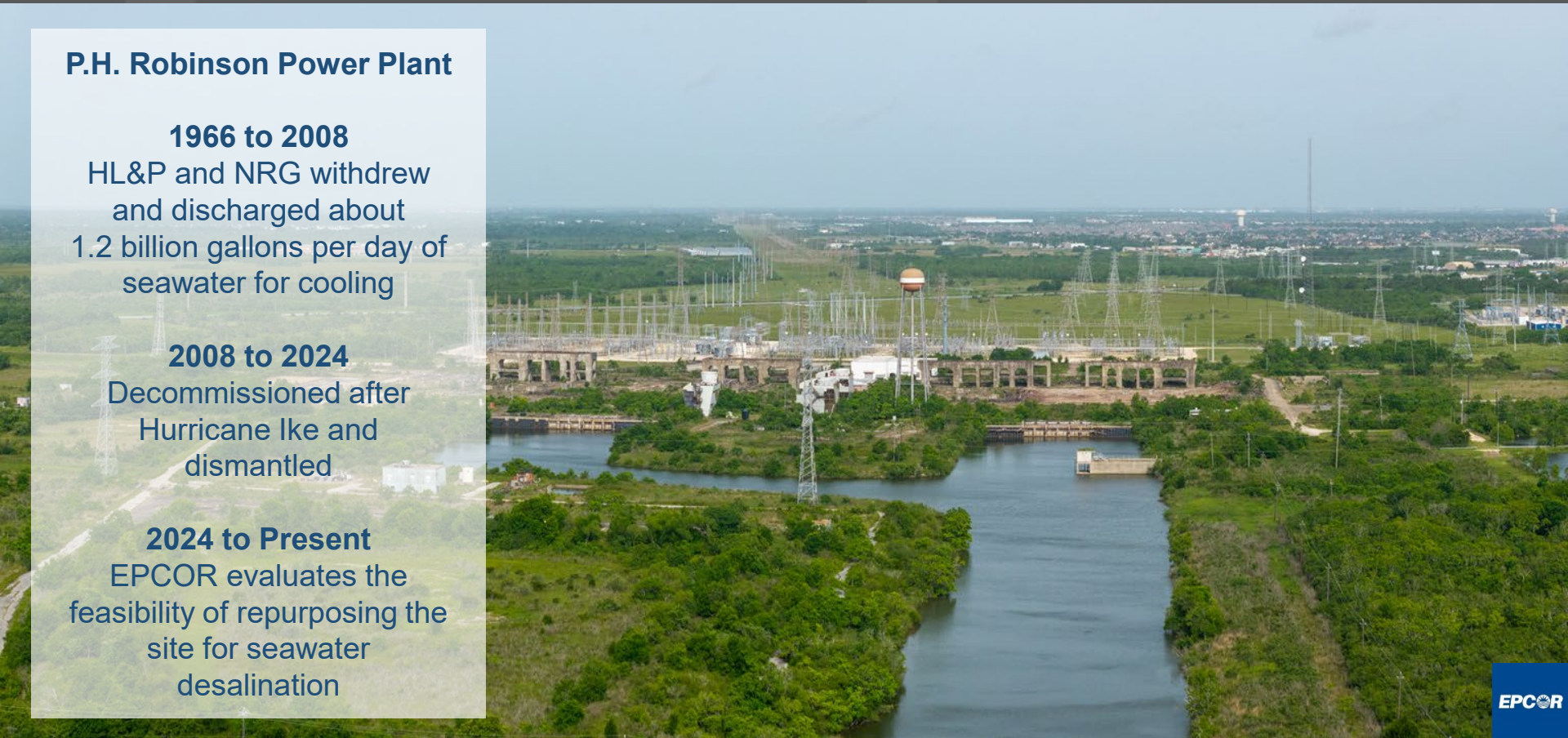
# Water for the Future

## P.H. Robinson Power Plant

**1966 to 2008**
HL&P and NRG withdrew and discharged about 1.2 billion gallons per day of seawater for cooling

**2008 to 2024**
Decommissioned after Hurricane Ike and dismantled

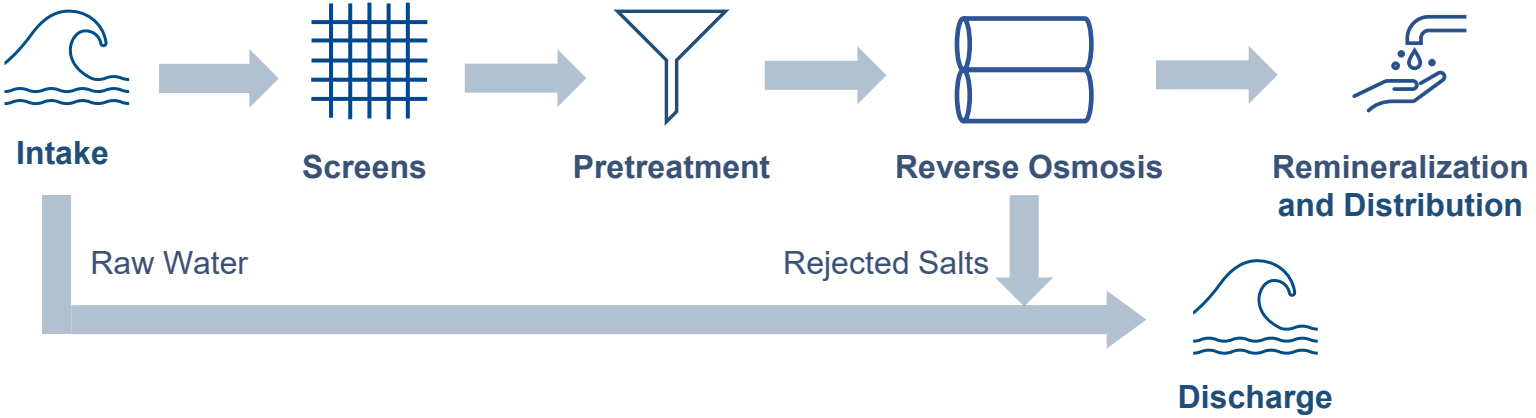
**2024 to Present**
EPCOR evaluates the feasibility of repurposing the site for seawater desalination



# What is the Bayshore Desalination Project?

- Treats seawater into **clean, safe, drinking water**
- Designed to **meet all federal and drinking water standards**
- **Prioritizes environmental safeguards** to protect Galveston Bay

## Bayshore Desalination Process

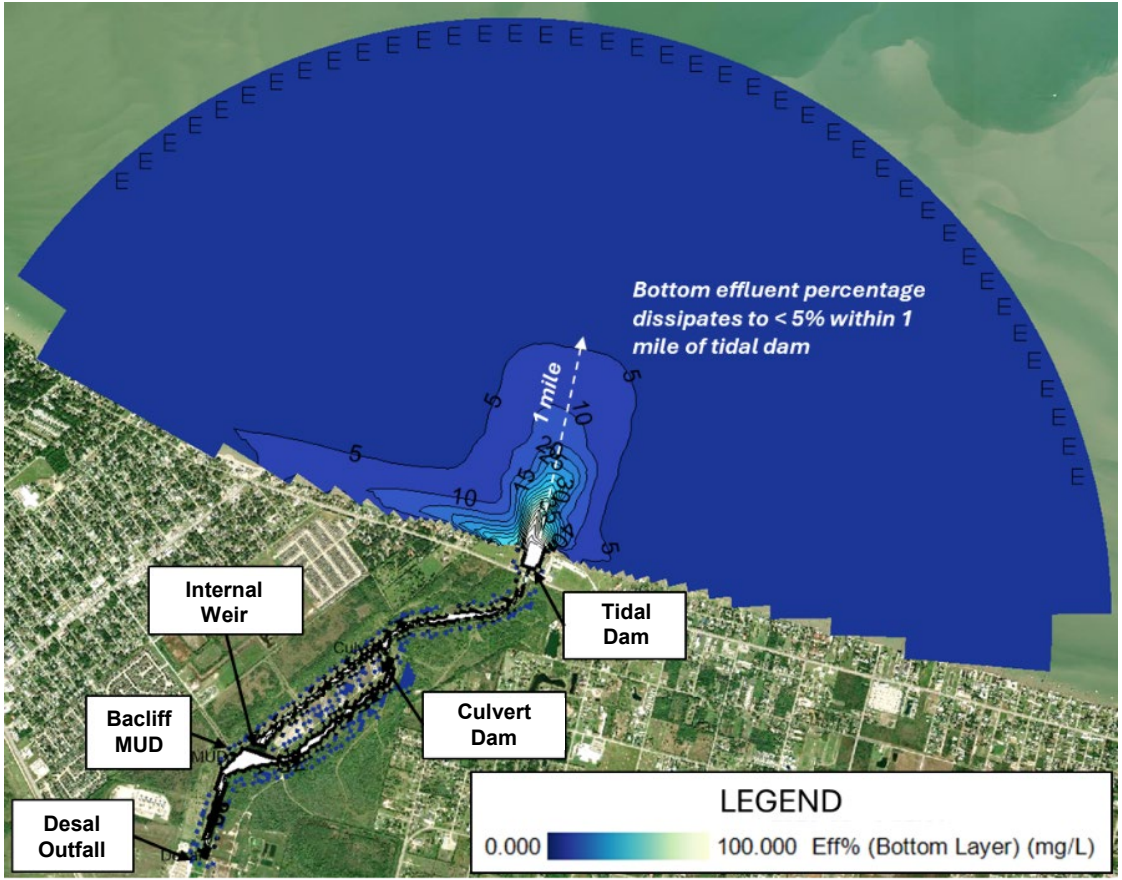


# EPCOR Near-field and Far-field Modeling

## Key Findings

At the point of discharge:

- **Salinity impact dissipates within 1 mile of the tidal dam** that connects the discharge channel to the bay
- **No significant increase in the risk of hypoxia**



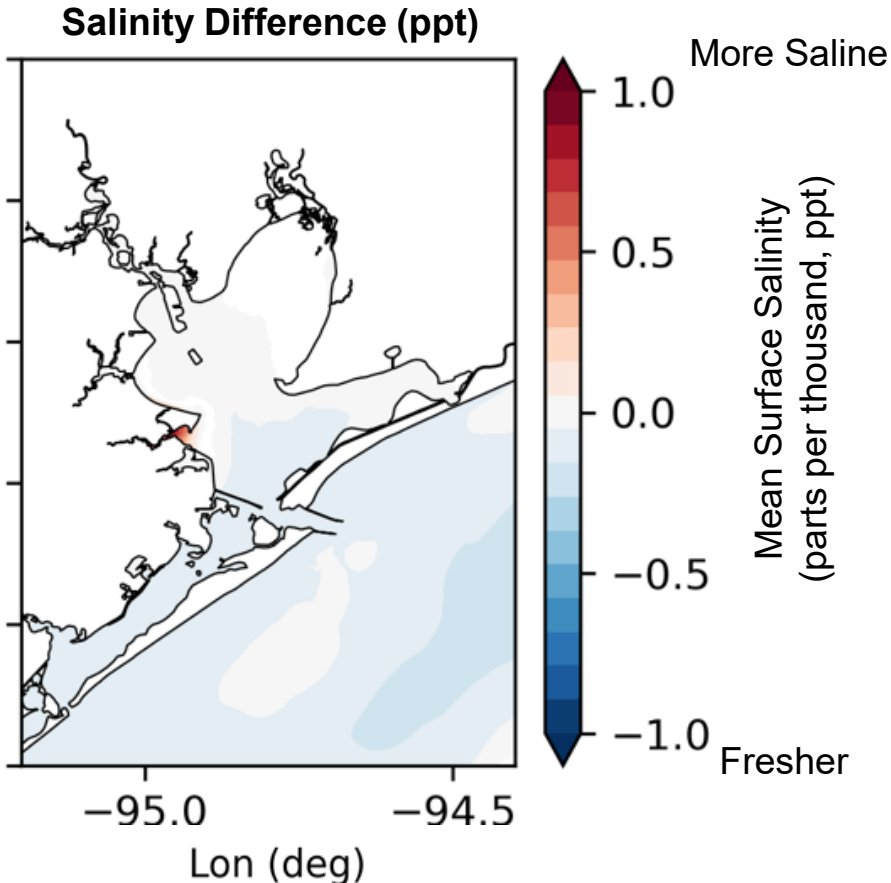
# Independent Review – Discharge Salinity



## Key Findings

In Galveston Bay:

- **No increase in bay salinity**
- **No significant increase in the risk of hypoxia**
- Some reduction in Lower Galveston Bay salinity due to increased circulation

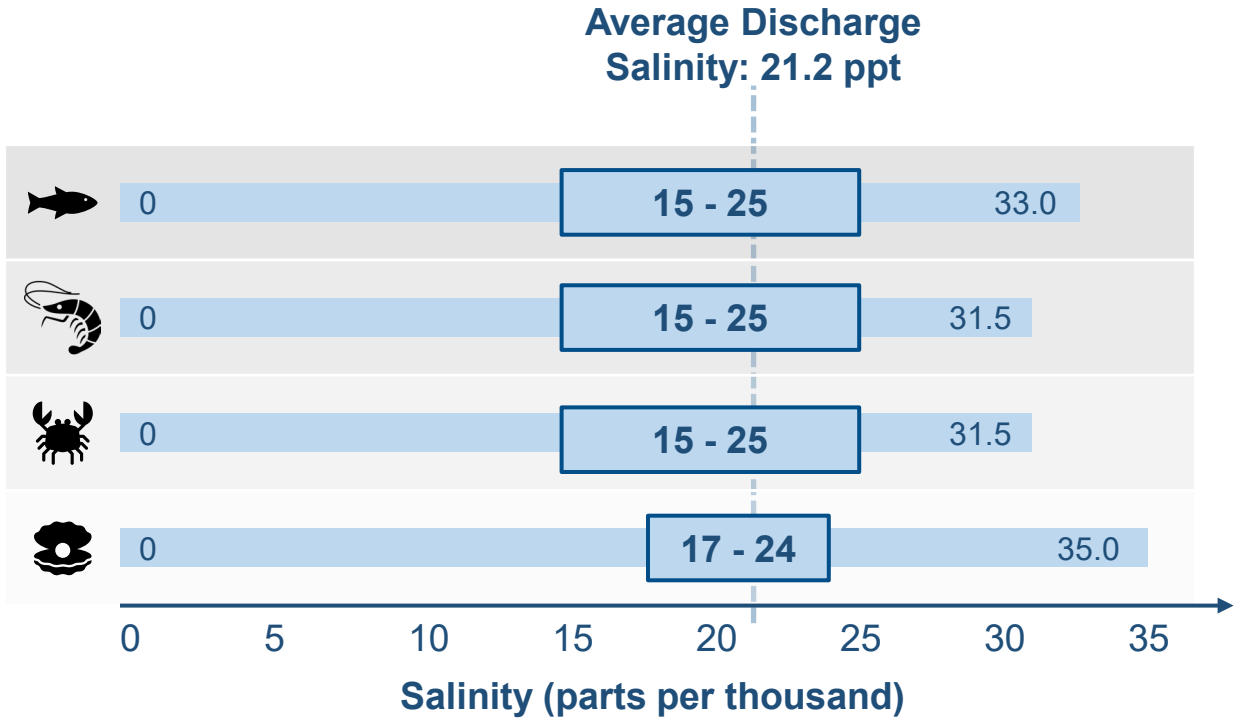


# Independent Review – Discharge Salinity

## Key Findings

Important species:

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



# Built-in Bay Protections

## FLOW AUGMENTATION

- Uses raw water to reduce salinity before discharge
- Effectively used in other sites: Tampa Bay, Florida and Carlsbad, California

## INTAKE DESIGN

- Low intake velocity minimizes risk of impingement of fish
- Small screen size minimizes risk of entrainment of organisms

# Permitting Information

## TPDES Permit Overview:

- Regulatory oversight to control discharges into surface waters
- Open, public process to review technical components of application including:
  - EPCOR Modeling
  - Texas A&M - Galveston Salinity and Marine Life Impact independent studies

# Permitting Timeline

| | | |
|---|---|---|
| Oct 2025 | ○ TCEQ Discharge Permit application submitted<br>○ BayshoreWaterTX.com made available before TCEQ notice |  |
| **Nov 2025** | ○ **Ongoing community outreach and engagement**<br>○ **1st notice: TCEQ Discharge Permit Application, available for public review and comment** |  |
| ~2026 | ○ TCEQ Notice of Application and Preliminary Decision (NAPD) and draft permit issued<br>○ 2nd notice published, draft permit available for public review and comment |  |
| ~2027 | ○ Final permit considered for approval |  |
| ~2028 | ○ Commercial contracts and construction begins |  |

# Our Track Record


- Project development
- Safety and operational excellence
- Job training and workforce development
- Employee engagement

# Questions and Answers

**BayshoreWaterTX.com**

**Contact:**
BayshoreWaterTX@epcor.com

EPCOR