

# Seawater Water Extraction

Texas Desal 2018

Managing Cost, Risk & Regulation

Presented by

Kim Wilson, Director  
Water Availability Division



# TWC, Sec. 11.021. STATE WATER.

(a) The water of the ordinary flow, underflow, and tides of every flowing river, natural stream, and lake, *and of every bay or arm of the Gulf of Mexico*, and the storm water, floodwater, and rainwater of every river, natural stream, canyon, ravine, depression, and watershed in the state is the property of the state.

TWC, Sec. 11.121. PERMIT REQUIRED. . . .  
no person may appropriate any state water or  
begin construction of any work designed for the  
storage, taking, or diversion of water without first  
obtaining a permit from the commission to make  
the appropriation.



# Applications to Divert Seawater for Desalination

- Permits to divert state water for desalination require submittal of a completed Water Right Application, including the Administrative Information Report and Technical Information Report . . . unless . . .
- the diversions are of “Marine Seawater” or “Seawater” pursuant to 30 TAC §295.300.



# What is Marine Seawater?

§295.301. Definitions.

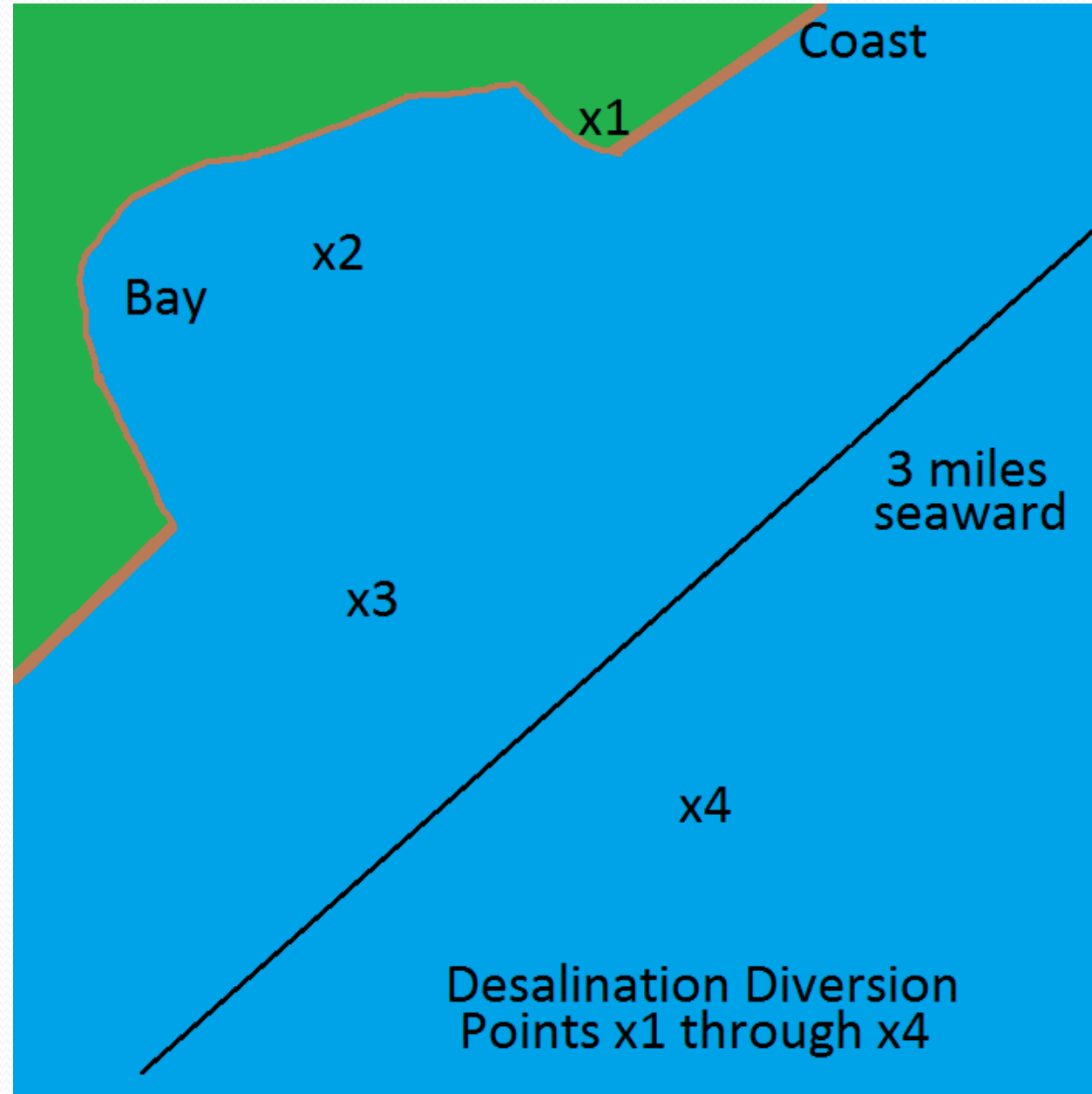
Marine seawater - Water that is derived from the Gulf of Mexico for desalination.

Seawater - Water that is derived from a bay or arm of the Gulf of Mexico for desalination and use solely for industrial purposes.



# Determining Which Permit Process





# Diversion Point x1

- This diversion of seawater or marine seawater is on the coast or inland.
- This is considered a new appropriation of State Water. A standard water right application is required even if the desalination is for industrial purposes.



# Diversion Point x2

- This diversion point is in a Bay.
- If the diversion point is used for desalination of seawater solely for industrial purposes, then the application is eligible for expedited procedures and alternative notice. TWC, §11.1405.
- If the diversion point is for any other purpose, then the application is subject to the standard water right application forms and notice.

# Diversion Point x3

- This diversion point is within 3 miles of the Texas Coast.
- Diversions of marine seawater less than 3 miles seaward of any point on the coast (and not in a bay) are eligible for expedited procedures and alternative notice under 30 TAC Chapter 295, Subchapter G.

# Diversion Point x4

- This diversion point is 3 miles or greater seaward of the coast.
- Diversions from this diversion point do not require a water right permit if the yearly average total dissolved solid (TDS) concentration exceeds 20,000 milligrams per liter.
- If the yearly average TDS is less than 20,000 milligram per liter a permit is required and is eligible for expedited procedures and alternative notice under 30 TAC Chapter 295, Subchapter G.

# Expedited Applications





# Expedited Application Requirements

- Water Right Administrative Information Report
- Technical Information
  - Total amount of water, purpose(s) and place(s) of use
  - Diversion Point Location Info – Worksheet 3.0
  - Evidence that treatment will meet TCEQ standards
  - Water Conservation Plan per §297.208
  - Info regarding consistency with State Water Plan
  - Determination of TDS per §297.205
  - impingement/entrainment - §297.209
  - Consultation with TPWD and GLO regarding points

# Time Frames



- 10-day Administrative Review
- 60-day Technical Review
  - As necessary
  - 30 day RFI period
  - RFI response period may extend the review period

# Approval Criteria

- Complete Application and Fee – including consults with TPWD and GLO
- Beneficial Use
- Appropriate treatment to TCEQ standards
- Not detrimental to the public welfare
- Consistent with State Water Plan
- Water Conservation and Avoidance of Waste
- No Water Availability Analysis required
- Chapter 298 E- Flow standards may be considered

# Notice

- Emailed notice to:
  - County judge(s)
  - TPWD
  - GLO
  - Persons requesting notice from TCEQ Chief Clerk
- Notice also posted to TCEQ website



