

NUECES RIVER
AUTHORITY

**Harbor Island Seawater
Desalinization Project**



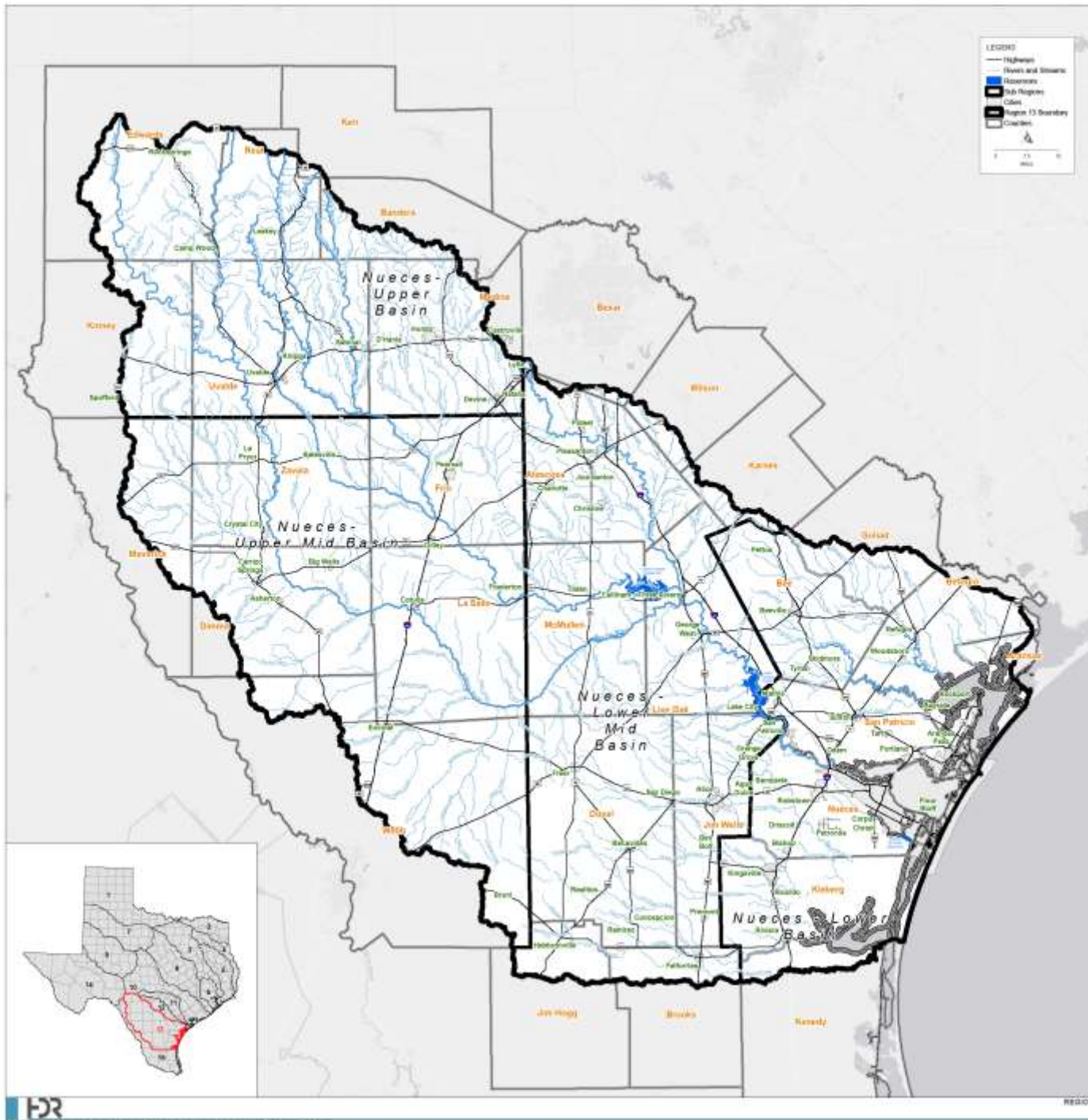
Nueces River

Authority

**Enabled by the Texas Legislature
in 1935**

Broad authority to:

- **preserve, protect, and develop water resources;**
- provide for flood control, irrigation, and navigation;
- develop parks and recreational facilities;
- finance water supply, treatment, & pollution control projects;
- receive state and federal grants and loans



- 17,000 Sq. Mi. Region of So. Texas
- 21 Counties in full
- 10 partial Counties
- Roughly 1 Million People
- 65 Cities
- 42 Water Districts
- Nueces, Frio and Atascosa Rivers and their tributaries
- Lake Corpus Christi
- Choke Canyon Reservoir



8

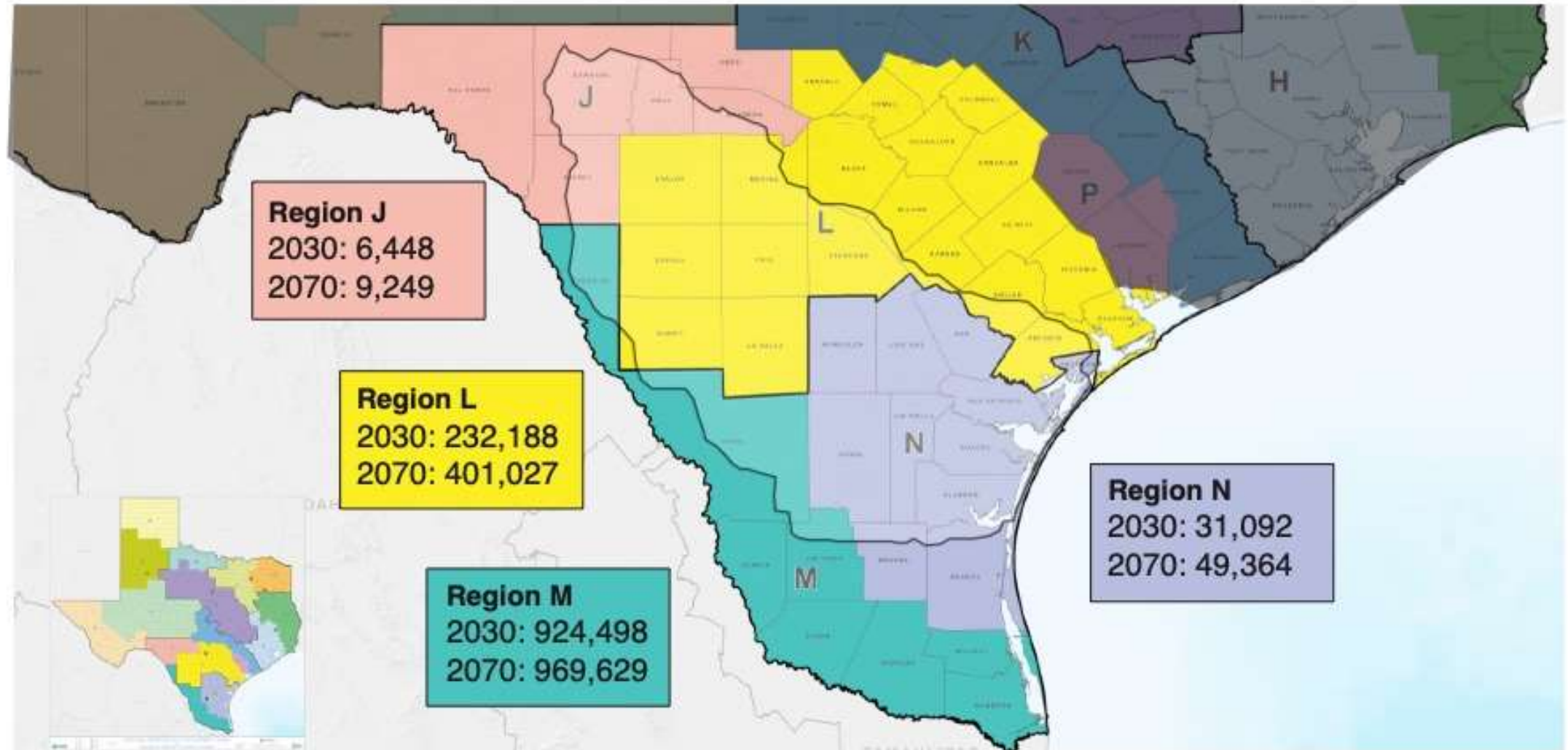
14.5

Low
Percent Full
Combine
Percent Full

Combine Total - 16.3 Percent Full



Potential Shortage Totals by Region - 2030 and 2070 (acre-feet/year)



is Water

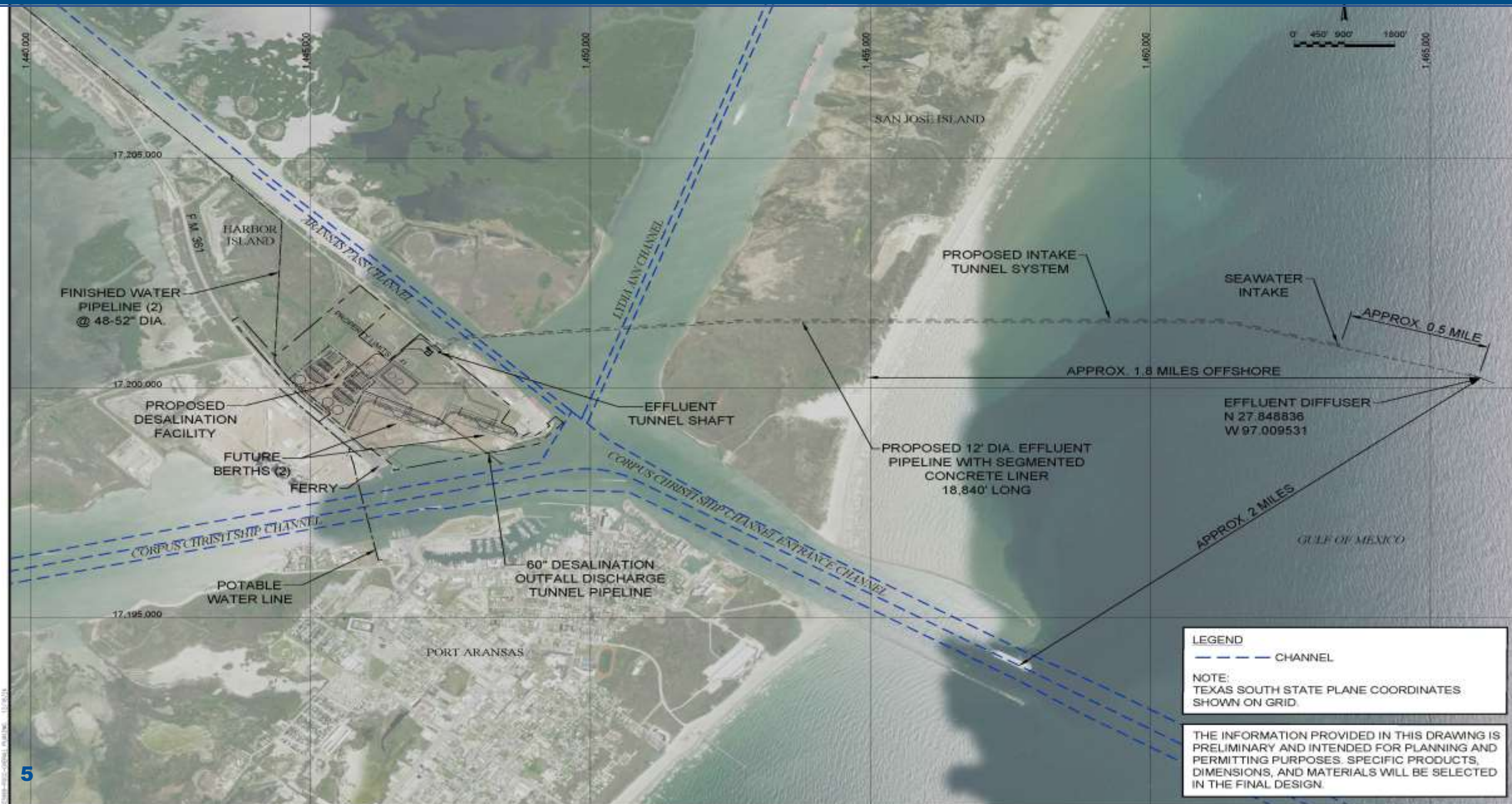


Texas Water Plan –
Emphasis moving to Larger
Projects addressing more
than one city/district

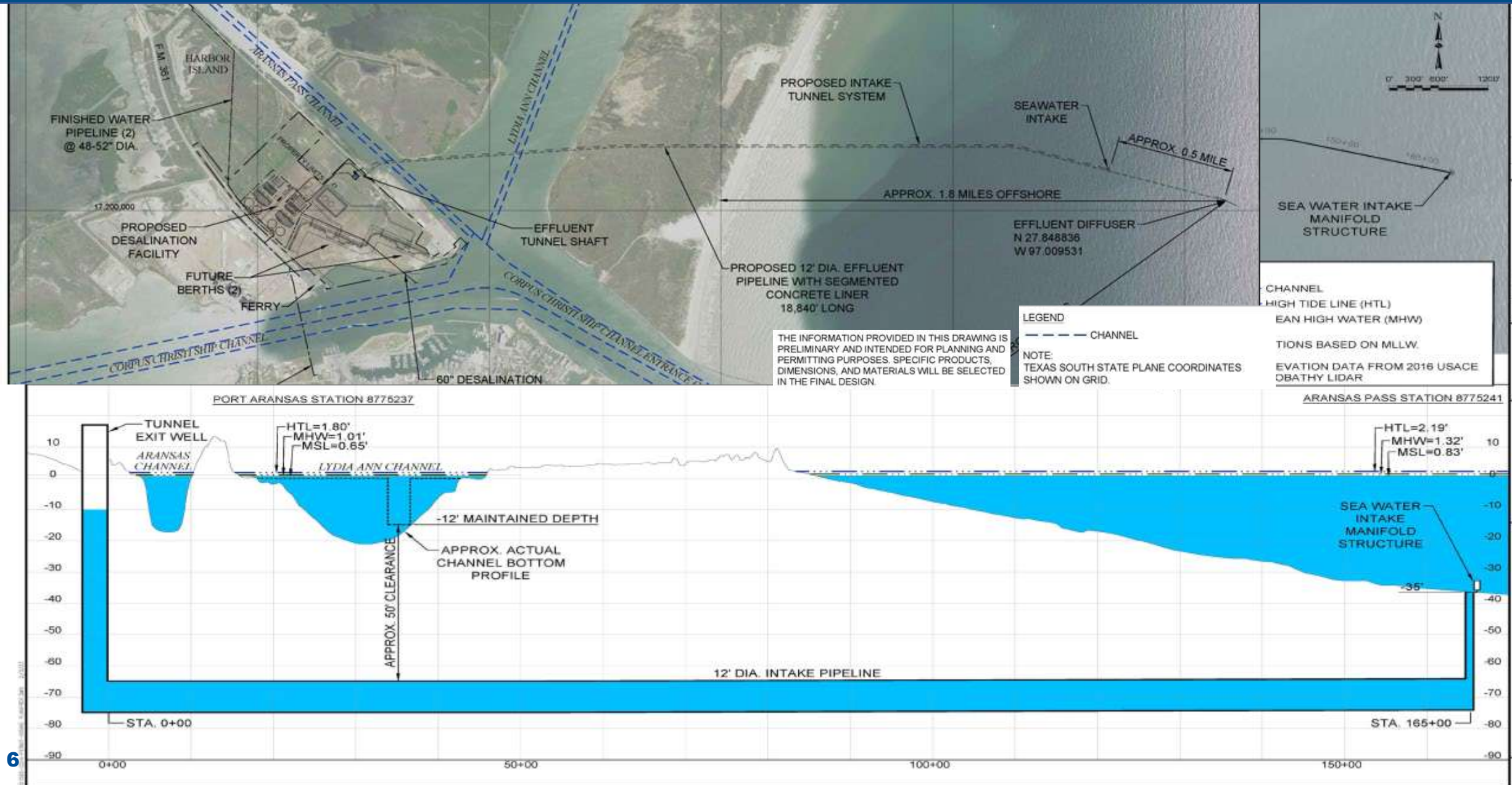
Regional Approach

Fewer – Larger – Economies
to Scale – Less \$

Overall Plan



Intake Structure



Summary of Potential Impacts (Avoided or Minimized)

Potential Impact	Avoided or Minimized	Description of Measures
Wetlands, SAV, oysters	Avoided	<ul style="list-style-type: none"> ○ Situate facilities to avoid impacts ○ Utilize HDD/micro-tunneling/tunneling
Larval Fish	Minimized	<ul style="list-style-type: none"> ○ Locate intake / discharge in Gulf of Mexico in 35'+ of water ○ Locate intake ~20' below surface ○ Reduce flow velocity (≤ 0.5 ft/s)
Marine Life / T&E Species	Avoided	<ul style="list-style-type: none"> ○ Locate intake / discharge in Gulf of Mexico in 35'+ ○ Locate intake ~20' below surface ○ Reduce flow velocity (≤ 0.5 ft/s) ○ Intake includes bar screens
Benthic Organisms	Avoided	<ul style="list-style-type: none"> ○ Locate intake and discharge at least 5' above sea floor
Salinity	Minimized	<ul style="list-style-type: none"> ○ Use of diffuser technology to mix salinity to diffuse brine to less than 2 ppt over ambient 100 meters from discharge point ○ Discharge in Gulf of Mexico
Cultural Resources	Avoided	<ul style="list-style-type: none"> ○ Designed to avoid identified cultural resources



NEXT

Where is the Water Going? YOU

Cost depends on the cost of pipeline to customer plus production fees

Reservation Contract for Industry Water Providers

- \$48.88 per Acre Foot = \$54,752.64 per Million MGD per Day
- Reserves your capacity at the Plant
- Over next 12 to 18 months,
 - Pipeline Plan
 - Preliminary Pricing
- Only 100 MGD capacity open to reservation now