



Development Board

OLA ID 1299051

PIF No. Not Assigned Yet

Entity Name: Corpus Christi

Project Name: Seawater Desalination

[View Project Details](#)

General Information

Contact Information

Service Area

Project Description

Readiness to Proceed to Construction

Estimated Costs

Additional Attachments

Submittal

General Information

Project Information

Funding Type SWIFT

Contact Information

County Nueces

Entity Contact Information	Engineering Firm Contact Information
Name of Entity Corpus Christi	Name of New Entity
Prefix	Prefix
First Name Esteban	First Name Jason
Last Name Ramos	Last Name Cocklin
Addr 1 2726 Holly Rd	Addr 1 800 N Shoreline Blvd
Addr 2	Addr 2 Ste 1600N
City Corpus Christi	City Corpus Christi
State TX	State TX
Zip 78415-0000	Zip 78401-3717
Phone (361) 826-3294	Phone (361) 561-6508
Fax	Fax
Suffix	Suffix
OrgName	OrgName
DeptName Water Department	DeptName Water and Wastewater Treatment
Title Water Resource Manager	Title Project Manager
Email EstebanR2@cctexas.com	Email JC@freese.com
	Firm Name Freese and Nichols, Inc.
Make Changes Y	Make Changes Y
No Entity TxWISE Id	No Engineering TxWISE Id

Service Area

Population Served 550,000

Project Description

Project Name Seawater Desalination

Where can Project be found in the most recent Regional Water Plan?

The project is described on page #: 5D.9-1

The capital cost is listed on page #: 5D.9-10

Region N - COASTAL BEND

Phase(s) Applied For

Planning Y

Acquisition Y

Design Y

Construction Y

Emergency

Applicant/entity's water supply will last less than 180 days. N

Applicant has received or applied for Federal emergency funding. N

None of the above. Y

Agricultural Efficiency Project? N

Estimated average annual residential water bill \$352.44

Annual Median Household Income \$55,709

Project will produce water Y

Project will conserve water N

Please provide the volume of water anticipated to be produced or conserved by the project per decade:

2020	2030	2040	2050	2060	2070
22400	22400	22400	22400	22400	22400

Project will address water loss N

Description of Proposed Project Components The project consists of a seawater desalination plant to be located near the entrance of the Inner Harbor Channel. The facility will produce potable water that will be incorporated and blended into the City of Corpus Christi Regional Water System. The plant will be designed to produce an average of 20 million-gallon-day (MGD) production. The intake and discharge facilities will be designed to accommodate a future expansion to 30 MGD.

The project is the result of a multi-year collaborative effort led by the City of Corpus Christi with the participation of the San Patricio Municipal Water District and other regional entities and customer representatives. This effort resulted in the recommendation to implement two seawater desalination plants. The first plant to be implemented and the subject of the present abridged application will be the Inner Harbor Channel Plant. A second plant to be pursued in the future will be located in the La Quinta Channel.

LIST OF PUBLIC WATER SYSTEMS SERVED BY THE PROPOSED PROJECT

NAME	PWS ID
The City of Corpus Christi	TX1780003
San Patricio Municipal Water District	TX2050011
The City of Alice	TX1250001
The City of Beeville	TX0130001
The City of Mathis	TX2050003
Nueces County Water Improvement District No. 4	TX1780006
South Texas Water Authority	TX1370035
Violet Water Supply Corporation	TX1780015
The City of Odem	TX2050004
The City of Taft	TX2050007
The City of Portland	TX2050005
The City of Gregory	TX2050001
The City of Ingleside	TX2050002
The City of Aransas Pass	TX2050015
The City of Rockport	TX0040002

Readiness to Proceed to Construction

Preliminary planning or design work (30% of total project) has been completed or is not required.

N

Applicant is prepared to begin implementation or construction within 18 months of application deadline. N

Applicant has acquired all water rights associated with the proposed project, or none will be required. N

Estimated Costs

TWDB Requested Amount

Low-Interest Loan Amount \$222475000.00

Deferred Loan Amount

Board Participation Amount

Local Contribution Amount

Other Amount

Other Desc

Total Estimated Project Costs \$222475000.00

Anticipated Debt Service for 2018 Loan Closing is anticipated to be: LEVEL

Seawater Desalination Project – Multiyear Commitment Schedule

The total low-interest loan amount for the Seawater Desalination project is \$222,475,000. The distribution of this amount over the years 2021 to 2022 is shown in Table 1 below.

Table 1: Low-Interest Loan Amount Distribution

Year	Amount
2021	\$11,425,000
2022	\$211,050,000
Total	\$222,475,000

Additional Attachments

The following documents are attached after this page:

Additional Information.pdf

Submittal

I, Dan Grimsbo, Executive Director of Utilities, as the designated authorized representative of the Corpus Christi, hereby approve and authorize the submission of this project information form to the Texas Water Development Board. I certify that all information contained herein is true and correct to the best of my knowledge. I understand the failure to submit a complete project information form by the stated deadlines may result in the withdrawal of the form without review.

Submitted by Dan Grimsbo, Executive Director of Utilities

Telephone Number (361) 826-1718

Submitted date 2020-02-03 14:59:01.77

SUBJECT:	Additional Information for SWIFT Abridged Application – Request for Preliminary Information by TWDB’s Lauren Dill.
PROJECT:	Seawater Desalination
DATE:	January 22, 2020

Additional information on the seawater desalination project that will help with the review of the SWIFT Abridged Application is listed below. Figure 1 illustrates the locations for the two sites selected to move forward with permitting phase. For the purpose of the SWIFT Application, only the Inner Harbor site (Nueces Bay Blvd) will be considered.

1. Proposed Project Footprint:

- a. Plant Site Area – Approximately 14 acres.
- b. Intake and Discharge Area – Approximately 3 acres.

2. Anticipated Environmental Impact:

TPDES permit related efforts show that the intake / discharge infrastructure and operation can be conducted in compliance with the state regulations. Efforts for the TPDES permit include CORMIX modeling, critical dilution for concentrate discharge, ambient background flow velocity, source water quality characterization, and a study of impact on the marine species near the intake / discharge.

3. Additional Natural and Cultural Resources Surveys:

The sites for the seawater desalination plant were selected from a pool of 20 alternative locations. The preliminary screening process included social and environmental considerations, and various desktop site surveys were conducted for the site selection process. These include habitat assessment for federally listed species, and environmental survey in the vicinity of the plant intake / discharge to identify potential environmentally sensitive marine areas like seagrass beds, oyster beds, and tidal wetlands.

4. Additional Agency Coordination and Permitting:

A Joint Evaluation Meeting was conducted on October 1, 2019 with US Army Corps of Engineers (USACE), US Fish and Wildlife Service (USFWS), and Texas Parks and Wildlife Department (TPWD) for general project coordination, and no major concerns were noted at that time. Further coordination is anticipated with the above listed agencies and with Texas Historical Commission (THC), and the local floodplain administrator.

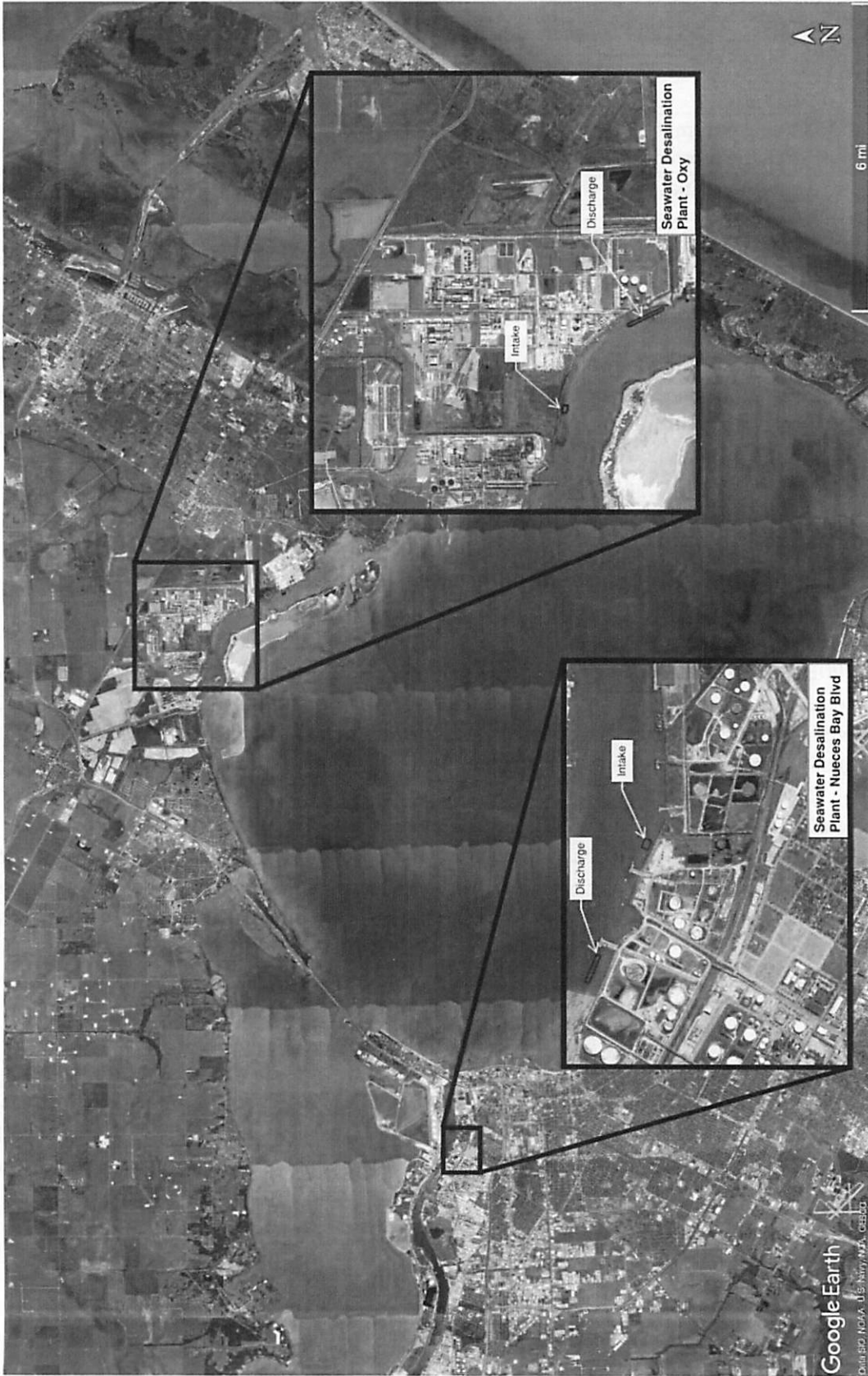


Figure 1: Seawater Desalination Sites Map