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April 2, 2025

DETERMINATION OF NO EFFECT

TO ALL POTENTIALLY INTERESTED AGENCIES:

Pursuant to the environmental assessment requirements of 31 Texas Administrative Code (TAC) § 363.14, the Texas Water Development Board (TWDB) has determined that the proposed action identified below may be exempted from formal environmental review requirements:

Laguna Madre Water District, Cameron County, Texas
TWDB SWIFT Project No. 51089
Seawater Desalination Plant Project,
Seawater Desalination Plant Pilot Project
Total Financing Amount: \$10,000,000
Loan No. L1001838

The Laguna Madre Water District (District) is proposing to use \$10,000,000 in financing from the State Water Implementation Fund for Texas Program for planning, acquisition, and design of a 5.0 million-gallon per day seawater desalination reverse osmosis water treatment plant in Port Isabel, Texas. The proposed seawater desalination plant project includes a pilot project that is required by the Texas Commission on Environmental Quality (TCEQ). After completing the proposed pilot project (pilot project), the District will submit a pilot test report to the TCEQ, seeking approval for the proposed full-scale seawater desalination plant. When the proposed pilot project is complete, the District will provide the pilot test report to the TCEQ to receive TCEQ approval for the proposed full-scale desalination plant.

The pilot project is considered a planning phase activity that will test the feasibility and design of the proposed full-scale seawater desalination plant using the same source of water from approximately the same location that will be used in the full-scale desalination plant. Therefore, the environmental review of the pilot project is being segmented from the remainder of the project. This Determination of No Effect (DNE) is for the pilot project. A subsequent environmental finding will be issued by the TWDB for the proposed full-scale seawater desalination plant project.

The pilot project consists of the following components, listed in order, from the proposed pilot seawater intake to the finished product:

- Self-cleaning intake screen

Our Mission	Board Members
Leading the state's efforts in ensuring a secure water future for Texas	L'Oreal Stepney, P.E., Chairwoman Tonya R. Miller, Board Member Bryan McMath, Executive Administrator

- Intake pump
- Intake pipeline
- Rapid mixer
- Flocculator
- Clarifier
- Micro filtration
- Intermediate tank
- Feed pump
- High pressure pump
- Seawater reverse osmosis
- Finished water [to flow into the District's lift station to the wastewater treatment plant (WWTP)]
- Concentrate (to flow into the District's lift station to the WWTP)

The proposed pilot intake will be in the Port Isabel Turning Basin at the Port Isabel Ship Channel. The proposed intake structure will be installed on a dock that belongs to Port Isabel Logistical Offshore Terminal Inc., located at 2000 Port Road, and extend approximately 20 feet below the water's surface. Approximately 500 linear feet of 6-inch polyvinyl chloride distribution pipeline will run on the surface of a roadside ditch to connect the proposed pilot intake to the proposed pilot plant. The proposed interconnection pipeline will be laid on top of the ground within the right-of-way and pass under Port Road through an existing culvert; no ground excavation is proposed. The proposed pilot plant will be on the parking lot and maintained lawn of Texas Pack, located at 508 Port Road, which is across the road from the proposed pilot intake.

The TCEQ issued a temporary water use permit (TCEQ Temporary Water Use Permit No. 14026) for the pilot project on February 5, 2025, for the purpose of diverting water from the proposed intake point on Port Isabel Channel Turning Basin for industrial purpose in Cameron County at a maximum rate of 0.446 cubic feet per second (200 gallons per minute) and not to exceed 323 acre-feet of water within a one-year period. The permit will expire one year from the date issued. The permit includes special conditions, including Condition A, which states that the "Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures shall include, but shall not be limited to, the installation of screens on the diversion structure."

There will be no discharge back into the Port Isabel Turning Basin from the proposed pilot plant, as all pilot plant discharge will be placed into the District's lift station at the proposed pilot location and processed through the District's WWTP. The proposed pilot intake will draw approximately 200 gallons per minute of water from the Port Isabel Turning Basin. The intake screens will have slot openings not to exceed 1 millimeter and an intake flow rate of less than 0.5 feet per second; therefore, there is no chance of impingement or entrapment of aquatic species at the intake screen.

Based on the District's discussions with the TCEQ, the pilot project is expected to last approximately 6 and could be extended to 8 months. The pilot equipment will be set up and interconnected for the duration of the pilot testing only. The pilot equipment will be skid mounted and contained in temporary awnings or tents, and some may be containerized in a trailer. Once the pilot project is complete, the equipment and all interconnecting piping, wiring, and controls will be disconnected, broken down, and removed. All equipment will go back to the manufacturers that provided the skids on a rental basis, and the remaining equipment will either be salvaged, recycled, or put in the trash.

The TWDB cannot fund testing, remediation, removal, disposal, or related works for contaminated or potentially contaminated materials. However, the District should ensure that, if found, such materials are tested, removed, and disposed of in accordance with applicable state and federal laws.

To ensure that there will be no adverse environmental impacts associated with the pilot project, the District coordinated with the United States Army Corps of Engineers (USACE), Regulatory Division, Galveston District, Corpus Christi Field Office, and the City of Port Isabel's floodplain administrator.

A response from the USACE, dated December 9, 2024, was received in the form of a verification letter (SWG-2024-00185) stating that temporary installation of the proposed raw water intake is verified by Nationwide Permit (NWP) 58 - Utility Line Activities for Water and Other Substances, pursuant to Section 10 of the Rivers and Harbors Act of 1899. The special conditions of the NWP are reflected in the special environmental conditions of this DNE.

Coordination with the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) was conducted as part of the USACE's interagency review. According to correspondence regarding review of the pilot project, dated January 27, 2025, the USACE's initial review for threatened and endangered species was completed with an effects determination of "no effect." The USACE did not receive any comments from the USFWS or NMFS on the pilot project during the interagency review. The USACE concluded that there is no requirement to consult with the other federal services regarding the pilot project.

Suitable nectar and host plants for the proposed listed (threatened) monarch butterfly (*Danaus plexippus*) may occur within the proposed project area; however, the proposed project will be constructed in an urbanized and disturbed setting and no permanent surface disturbances will occur because of the pilot project. Therefore, according to the District's impact assessment, the pilot project is expected to have no impact on this species. As the monarch is proposed to be listed as threatened under the Endangered Species Act, protections do not apply until the effective date of a final listing rule. USFWS consultation is not required for the monarch butterfly at this time; however, if the species is listed prior to construction, consultation may be required. This environmental finding is conditioned to

state that the District will conduct additional coordination with the USFWS, to ensure compliance with the Endangered Species Act, if the monarch butterfly becomes federally listed prior to construction.

A response from the City of Port Isabel's floodplain administrator, dated February 19, 2025, stated that the pilot project is in the 500-year floodplain as designated by the Federal Emergency Management Agency. Therefore, the floodplain administrator concluded that a floodplain development permit is not required for the pilot project.

There are no previously recorded significant or potentially significant historic or cultural sites within or adjacent to the pilot project footprint, according to the Texas Historical Commission's Archeological Sites Atlas, nor is the pilot project within the protected area surrounding a historic cemetery, structure, or district.

The decision to grant a DNE is allowed because the specified project elements should not cause significant adverse impacts to the quality of the environment. Documentation supporting this determination is on file at the TWDB.

This determination shall be revoked if it is found that

- (1) the project no longer meets the requirements for categorical exclusion from full environmental review as a result of changes in the project;
- (2) the project involves extraordinary circumstances as described in 31 TAC § 363.14; or
- (3) the project may violate or has violated federal, state, local, or tribal laws.

The pilot project must comply with the following special and standard environmental conditions:

Special Environmental Conditions

- Consistent with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899, the proposed project will comply with the terms and conditions of United States Army Corps of Engineers Nationwide Permit 58 – Utility Line Activities for Water and Other Substances (USACE Permit No. SWG-2024-00185). The following special conditions are included in the permit:
 - The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without

expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

- When structures or work authorized by this permit are determined by the District Engineer to have become abandoned, obstructive to navigation, or cease to be used for the purpose for which they were permitted, such structures or other work must be removed, the area cleared of all obstructions, and written notice given to the Corps of Engineers, Galveston District, Regulatory Division, Chief of the Compliance Branch/Corpus Christi Field Office, within 30 days of completion.
 - The permittee must install and maintain, at the permittee's expense, any safety lights, signs, and signals required by U.S. Coast Guard, through regulations or otherwise, on the permittee's fixed structures. To receive a U.S. Coast Guard Private Aids to Navigation marking determination, at no later than 30 days prior to installation of any fixed structures in navigable waters and/or prior to installation of any floating private aids to navigation, you are required to contact the Eighth Coast Guard District (dpw), 500 Poydras St. Suite 1230, New Orleans, LA 70130, (504) 671-2328 or via email to: D8oanPATON@uscg.mil. For general information related to Private Aids to Navigation please visit the Eight Coast Guard District web site at: <http://www.uscg.mil/d8/waterways/PATON.Home.asp>.
 - The permittee will notify the National Oceanic and Atmospheric Administration (NOAA), Center for Operational Oceanographic Products and Services (CO-OPS), Todd Ehret prior to construction of the temporary intake pipe and when the pipe would be in operation. NOAA requests notification in order to monitor station sensors and data and to coordinate for diver safety during NOAA's sensor maintenance operations.
- If the monarch butterfly (*Danaus plexippus*) becomes federally listed prior to construction, the Laguna Madre Water District will conduct additional coordination with the United States Fish and Wildlife Service to ensure compliance with the Endangered Species Act.
 - The pilot project will comply with the terms and conditions of the Texas Commission on Environmental Quality temporary water use permit (TCEQ Temporary Water Use Permit No. 14026).
 - Consistent with Special Condition A. of the Texas Commission on Environmental Quality temporary water use permit (TCEQ Temporary Water Use Permit No. 14026), to avoid impingement or entrapment of aquatic species at the pilot intake, screens with slot openings not to exceed 1 millimeter will be installed on the diversion structure and the intake flow rate will be less than 0.5 feet per second.

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Standard Environmental Conditions

- Consistent with the Texas Water Development Board Supplemental Construction Contract Conditions (TWDB-0552), the Laguna Madre Water District will abide by the standard emergency condition for the discovery of cultural resources.
- Consistent with the Texas Water Development Board Supplemental Construction Contract Conditions (TWDB-0552), the Laguna Madre Water District will abide by the standard emergency condition for the discovery of threatened and endangered species.

Comments regarding this determination may be submitted to the Director of Regional Water Project Development, Texas Water Development Board, P.O. Box 13231, Austin, Texas 78711-3231 or via email at RWPD-Environmental@twdb.texas.gov.

Sincerely,

T. Clay Schultz, Ph.D., Director
Regional Water Project Development

Enclosures

