June 27, 2022

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) staff has determined that proposed action identified below may be exempted from formal environmental review requirements:

Brazosport Water Authority, Brazoria County, Texas
TWDB SWIFT Project No. 51013
Brackish Groundwater Reverse Osmosis Water Treatment Plant and Water Wells Project
Effluent Outfall Line, Outfall Structure, and Constructed Water Supply Line
Total Financing Amount: $28,300,00
(LM15015, LM16015)

The Brazosport Water Authority (Authority) provides wholesale water service to seven cities in the southern Brazoria County area, Dow Chemical Company, and two Texas Department of Criminal Justice units. In December 2013, the Authority completed a TWDB Regional Water Facility Planning Grant Study (Study) that examined the potential for serving the Authority’s current service area, as well as other portions of Brazoria County in the future. The study led to several recommendations, including the development of a Reverse Osmosis (RO) Water Treatment Plant (WTP) at the Authority’s current surface WTP to be fed by a new brackish groundwater well field in the vicinity of the existing WTP site.

The Authority is proposing to use $28,300,000 in financing from the State Water Infrastructure Fund for Texas (SWIFT) Program for the planning, design, and construction phases required to implement the proposed project. The project consists of several components. On the Authority’s existing WTP site, there will be two brackish groundwater wells and the brackish groundwater desalination plant. On a satellite site, there will be two brackish groundwater wells (Well Nos. 3 and 3A) connected to the brackish groundwater desalination WTP site via a groundwater supply line. A concentrate disposal outfall line will run from the WTP site to the Brazos River. This clean effluent from the RO process is permitted by the Texas Commission on Environmental Quality (TCEQ) using a Texas Pollutant Discharge Elimination System (TPDES) permit number WQ0005145000.
This Determination of No Effect (DNE) is completed for the Effluent Outfall Line, Outfall Structure, and Constructed Water Supply Line phase of the project that includes a groundwater supply line, a new concentrate outfall line, and associated outfall structure. The environmental review of this project is being segmented into multiple environmental findings for various phases. On July, 2016, a DNE was issued for Well No. 1 (located at the existing WTP). On March 29, 2019, a DNE was issued for Well Nos. 3 and 3A. The Authority’s existing WTP site was addressed in the following environmental findings prepared for the Authority’s WTP Improvements project (TWDB Project No. 62643: 1) Admin Building, Categorical Exclusion, dated May 28, 2015 and 2 WTP Rehabilitation/Upgrade dated September 30, 2016.

A groundwater supply line and concentrate outfall lines located in the FM 2004 Right-of-Way (ROW) will be constructed using conventional open trench methods. These lines are in the maintained ROW of FM 2004 and run parallel to the Authority’s existing 16-inch potable water line installed in the late 1980s. This area has been previously disturbed by the construction and maintenance of FM 2004 and the construction of the existing 16-inch potable water line. Construction of the concentrate outfall line from Well No. 3 site to the Brazos River is through the City of Lake Jackson Wilderness Park. Consequently, this portion of the outfall will be constructed via horizontal directional drilling methods to eliminate surface impacts and avoid vegetation removal during construction.

To ensure that there will be no adverse environmental impacts associated with the construction, the Authority coordinated with relevant local floodplain administrators; Texas Historical Commission (THC); and the United States Army Corps of Engineers (USACE).

**Local Floodplain Administrator**
The Authority contacted the City of Lake Jackson, where the proposed project is located, local floodplain administrator on March 17, 2022, for review of the proposed project area. The floodplain administrator responded on April 25, 2022, granting permission to proceed with the installation of the concentrate outfall pipeline. Should any project details change, the floodplain administrator will be consulted.

**Texas Historical Commission**
In June 2021, an intensive cultural resources survey was conducted by ACI Consulting as part of the Authority’s due diligence for the concentrate outfall line’s 1.35-acre Area of Potential Effect (APE). The investigation consisted of an intensive pedestrian survey, shovel testing, site recording, assessment of sites for listing on the national Register of Historic Places or for designation as a State Antiquities Landmark, data analysis, and reporting in accordance with the THC and Council of Texas Archaeologists standards. The Authority contacted the THC on May 10, 2021, requesting a review of the proposed project site (THC
The THC provided a review response dated July 5, 2021, indicating concurrence with the assessment that cultural resources are not likely to be present within the proposed project area. Therefore, the construction of proposed project is not expected to impact cultural resources.

United States Army Corps of Engineers
The Authority submitted a request to the USACE on July 23, 2021, requesting review and approval of the construction of the concentrate outfall line and the associated outfall structure under Nationwide Permit (NWP) 7 pursuant to Section 404 of the Clean Water Act and/or Section 10 of the River and Harbors Act of 1899 (SWG-1997-00999). In a letter dated August 23, 2021, the USACE Galveston District provided verification of the project under NWP 7. Information submitted to the USACE indicated that the approximately 1,330 linear feet of concentrate outfall line to be constructed between the Well No. 3 site and the Brazos River outfall will be installed via trenchless construction methods. Consequently, no trees will be cleared. Should project details change, the USACE will be consulted as well as the Texas Parks and Wildlife Department.

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 a categorical exclusion from a 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 project must comply with the following environmental conditions:

- Compliance with the terms and conditions of United States Army Corps of Engineers, Galveston District, Nationwide Permit 7 for Outfall Structures and Associated Intake Structures (USACE No. SWG-1997-00999). To ensure compliance with this agreement, construction of the concentrate outfall line from the Well No. 3 site to the Brazos River outfall structure will be performed via trenchless methods (horizontal boring);
- Standard emergency condition for the discovery of cultural resources; and
- Standard emergency condition for the discovery of threatened and endangered species.
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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,

Ted Yates

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

Enclosures
Brazosport Water Authority
Brackish Groundwater Desalination
Concentrate Outfall and Brackish Groundwater Supply Lines