MEMORANDUM

TO: File

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

DATE: May 23, 2022

RE: Alliance Regional Water Authority, Caldwell County, Texas
    Alliance Regional Water Authority Phase 1B, Segment D
    TWDB SWIFT Project No. 51044

The attached Environmental Determination (ED) contains the Texas Water Development Board (TWDB) staff’s views regarding the environmental soundness of the Segment D water line components of the Alliance Regional Water Authority Phase 1B Project proposed by the Alliance Regional Water Authority (Authority), Caldwell County, Texas.

The Authority is proposing to use $278,410,000 in multi-year financing from the State Water Implementation Fund for Texas (SWIFT). The Texas Water Development Board (TWDB) committed this financing on July 20, 2017, and July 23, 2020. The Authority closed on a portion of this financing on November 22, 2017; November 20, 2019; and November 20, 2020.

The Authority’s Phase 1B project is a multi-phase project located in Caldwell, Guadalupe, and Hays counties. The Authority will develop a Carrizo aquifer well field with an initial capacity of 5,500 acre-feet per year and an ultimate capacity of 35,690 acre-feet per year. Additional components are proposed to treat and deliver the groundwater produced by the new well field to each of the member utilities (City of San Marcos, Canyon Regional Water Authority, City of Kyle, and City of Buda). These include a new water treatment plant (WTP), raw water line from the well field to the new WTP, a booster pump station (BPS), the transmission line from the new WTP to the BPS, and two transmission lines from the BPS with eight connection points, connecting all members to the new regional water source.
This ED applies to Segment D, which is a 18-mile transmission line starting at an Administration Operations and Booster Pump Facility site (near the intersection of State Highway 142 and Farm to Market Road 1966) near Maxwell, Caldwell County, Texas, to one delivery point and will connect to the Segment E pipeline, just southeast of Staples, Guadalupe County, Texas. An Elevated Storage Tank (EST) will be constructed on a 1.4-acre site adjacent to the Segment D pipeline and is also included in this ED.

Various segments of the project will be completed under separate environmental findings. Completed EDs include Segment B (September 21, 2021); Segment A (May 20, 2021); the water treatment plant and Well Nos. 6 to 9 (January 28, 2020); and the operations office and facility booster pump station (August 14, 2019). A Determination of No Effect was issued on May 22, 2018 for proposed acquisition of an approximately 558-acre tract of land for a well field off of Wolf Run Road.

An environmental review of the proposed project has been completed consistent with the guidelines provided in 31 Texas Administrative Code § 363.14. This environmental review is documented by the enclosed ED, which contains mitigative environmental conditions that will be applied to the project in order to avoid significant adverse impact on floodplains, cultural or historical resources, threatened or endangered species, and protected migratory bird species. Based on a detailed environmental review of the planning information, the Environmental Data Form, and other documentation, the proposed project is considered to be environmentally sound with the following conditions:

Based on a detailed environmental review of the planning information, the Environmental Data Form dated April 12, 2022, and other documentation, the proposed project meets the requirements of 31 TAC § 363.14 with the following conditions:

- To ensure compliance with the Migratory Bird Treaty Act and Texas Wildlife Code, vegetation clearing will not be performed, if avoidable, during the migratory bird nesting period from March 15 through September 15, to avoid adverse impacts to breeding birds. However, if clearing vegetation during the migratory bird nesting season is unavoidable, nest surveys should take place within 5 days of scheduled clearing in order to maximize the detection of active nests. If nests are observed during surveys, a vegetation buffer area of no less than 150-feet in diameter should remain around the nest until all young have fledged;

- Compliance with the terms and conditions of United States Army Corps of Engineers Nationwide Permit (NWP) 58 Utility Line Activities for Water and Other Substances. (USACE No. SWF-2020-00505), valid until March 14, 2026, including compliance with the following NWP 58 special conditions:
  - All activities must comply with the water quality certification conditions of the TCEQ.
  - Any temporary or permanent discharges that may occur in waters of the United States beyond those proposed in the cultural resource survey report
dated February 2022 shall require notification of USACE to verify the requirements of 33 CFR 325 (Appendix C) and 36 CFR 800. Temporary discharges into waters of the United States are not limited to but include temporary culverts or matting for construction access purposes including for bore or drill locations.

- If buried cultural remains are encountered during construction, the remains shall be avoided and the USACE contacted to assess the site for eligibility to the National Register of Historic Places and to comply with 33 CFR 325 (Appendix C) and 36 CFR 800. The permittee shall conduct a meeting with construction contractors prior to construction and notify USACE two weeks in advance of the meeting.

- To comply with the requirements of the Federal Emergency Management Agency regarding implementation of the National Flood Insurance Act, Flood Disaster Protection Act, National Flood Insurance Reform Act, Federal Executive Orders 11988 and 11990, and to comply with related state statutes and local floodplain development ordinances, proponents of construction projects in special flood hazard areas must coordinate in advance with the local floodplain administrator and obtain a floodplain development permit prior to design approval;
- Standard emergency condition for the discovery of cultural resources; and
- Standard emergency condition for the discovery of threatened and endangered species.

With the addition of these requirements, design funds may be released once all other requirements are satisfied.

Enclosure
ENVIRONMENTAL DETERMINATION

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

THROUGH: Dain Larsen, Manager, Team 5 – Central (Regions J, K, L and P)

FROM: Kristin Miller, Natural Resource Specialist (Environmental Reviewer)

DATE: May 23, 2022

SUBJECT: Alliance Regional Water Authority, Caldwell County, Texas
        Alliance Regional Water Authority Phase 1B
        Segment D
        TWDB SWIFT Project No. 51044
        Total Commitment Amount: $278,410,000

The Authority is proposing to use $278,410,000 in multi-year financing from the State Water Implementation Fund for Texas (SWIFT). The Texas Water Development Board (TWDB) committed this financing on July 20, 2017, and July 23, 2020. The Authority closed on a portion of this financing on November 22, 2017; November 20, 2019; and November 20, 2020.

The Authority’s Phase 1B project is a multi-phase project located in Caldwell, Guadalupe, and Hays counties. The Authority will develop a Carrizo aquifer well field with an initial capacity of 5,500 acre-feet per year and an ultimate capacity of 35,690 acre-feet per year. Additional components are proposed to treat and deliver the groundwater produced by the new well field to each of the member utilities (City of San Marcos, Canyon Regional Water Authority, City of Kyle, and City of Buda). These include a new water treatment plant (WTP), raw water line from the well field to the new WTP, a booster pump station (BPS), the transmission line from the new WTP to the BPS, and two transmission lines from the BPS with eight connection points, connecting all members to the new regional water source.

This Environmental Determination (ED) applies to Segment D transmission pipeline which consists of approximately 18.8 miles of up to 42-inch diameter water transmission line and an adjacent Elevated Storage Tank (EST).
Various segments of the project will be completed under separate environmental findings. Completed EDs include Segment B (September 21, 2021); Segment A (May 20, 2021); the water treatment plant and Well Nos. 6 to 9 (January 28, 2020); and the operations office and facility booster pump station (August 14, 2019). A Determination of No Effect was issued on May 22, 2018 for proposed acquisition of an approximately 558-acre tract of land for a well field off of Wolf Run Road.

**PROJECT DESCRIPTION**

This ED includes an assessment of the subproject described as the Segment D transmission pipeline, which consists of approximately 18.8 miles of up to 42-inch diameter water transmission pipeline that will convey treated water from the Administration Operations and Booster Pump Facility site (located near the intersection of State Highway 142 and Farm to Market Road 1966) near Maxwell, Caldwell County, Texas, to one delivery point and will connect to the Segment E pipeline, just southeast of Staples, Guadalupe County, Texas. An Elevated Storage Tank (EST) will be constructed on a 1.4-acre site adjacent to the Segment D pipeline and is included in this ED.

Proposed construction methods to be used at Waters of the U.S. crossings for this project will involve both trenching and boring. The details for construction at each crossing are included in the Waters of the U.S. Delineation Report and Section 404 Information.

**PURPOSE AND NEED**

The Authority is a political subdivision of the State of Texas that was established to provide drinking water to satisfy the needs of four sponsors: City of Kyle, City of Buda, City of San Marcos, and Canyon Regional Water Authority (Sponsors). In addition, the Authority has an agreement with the Guadalupe-Blanco River Authority (GBRA) to construct oversized portions of the proposed infrastructure to deliver water to three of GBRA's wholesale customers. The Authority was formed to pursue a regional water project to meet the Sponsors' future water needs. Some of the Sponsors are projected to soon have water shortages. By 2033, all Sponsors will not be able to meet their demand with their current water sources. The Authority was formed in 2007 to pursue a regional water source for meeting the Sponsors' future water needs. According to the 2017 Texas State Water Plan Projections, the proposed project is estimated to meet future regional needs through the year 2070.

**PUBLIC PARTICIPATION**

The proposed project does not involve any known permitting, socioeconomic impacts, or environmental; historical, or cultural resources issues that may affect
the evaluation of project alternatives or implementation of the proposed project, such as rate increases, displacement of persons, disproportionate effect on minorities or those living beneath the poverty line potential impacts to known cultural resources, potential impacts to waters of the U.S, or to protected species or similar public concerns. Therefore, no public meeting was required.

AGENCY COORDINATION

This environmental review included coordination with various state and federal regulatory agencies, local authorities, and other stakeholders and interested parties regarding the proposed project’s potential impact. The Authority submitted notifications to and requests for input from all required parties. Some entities did not require a response. The respondents are listed below, and the results of coordination are summarized in the EID and reflected in the environmental conditions.

- Texas Historical Commission, State Historic Preservation Officer, Austin, in accordance with the regulations of the Antiquities Code of Texas (Texas Antiquities Permit No. 8816 and THC Tracking No 202206674);
- United States Army Corps of Engineers, Regulatory Branch, Fort Worth District, in accordance with Section 404 of the Clean Water Act; and Section 10 of the Rivers and Harbors Act of 1899 (Project Number SWF- 2020-00505, Nationwide Permit 58 for Utility Line Activities);
- Texas Parks and Wildlife Department, Wildlife Habitat Assessment Program, Austin in accordance with the Endangered Species Act of 1973, as amended; Migratory Bird Treaty Act; Texas Parks and Wildlife Code; and other applicable regulations; and
- United States Fish and Wildlife Service, Austin Ecological Services Field Office, in accordance with the Endangered Species Act and statutes affecting other federally protected species.

No response was required from the following entities:

- Bureau of Reclamation, Oklahoma-Texas Area Office;
- Bureau of Land Management; and
- Local Floodplain Administrator pursuant to the National Flood Insurance Program.
CONDITIONS AND RECOMMENDATIONS

An environmental review of the proposed project has been completed consistent with the guidelines provided in 31 TAC § 363.14. The environmental review is documented by this ED, which contains environmental conditions that will be applied to the project to avoid significant adverse impact on floodplains, cultural or historical resources, threatened or endangered species, and protected migratory bird species.

The Authority has committed to any special environmental conditions and has the ability and authority to do so. The proposed project must comply with the following environmental conditions:

• To ensure compliance with the Migratory Bird Treaty Act and Texas Wildlife Code, vegetation clearing will not be performed, if avoidable, during the migratory bird nesting period from March 15 through September 15, to avoid adverse impacts to breeding birds. However, if clearing vegetation during the migratory bird nesting season is unavoidable, nest surveys should take place within 5 days of scheduled clearing in order to maximize the detection of active nests. If nests are observed during surveys, a vegetation buffer area of no less than 150-feet in diameter should remain around the nest until all young have fledged;

• Compliance with the terms and conditions of United States Army Corps of Engineers Nationwide Permit (NWP) 58 Utility Line Activities for Water and Other Substances. (USACE No. SWF-2020-00505), valid until March 14, 2026, including compliance with the following NWP 58 special conditions:
  o All activities must comply with the water quality certification conditions of the TCEQ.
  o Any temporary or permanent discharges that may occur in waters of the United States beyond those proposed in the cultural resource survey report dated February 2022 shall require notification of USACE to verify the requirements of 33 CFR 325 (Appendix C) and 36 CFR 800. Temporary discharges into waters of the United States are not limited to but include temporary culverts or matting for construction access purposes including for bore or drill locations.
  o If buried cultural remains are encountered during construction, the remains shall be avoided and the USACE contacted to assess the site for eligibility to the National Register of Historic Places and to comply with 33 CFR 325 (Appendix C) and 36 CFR 800. The permittee shall conduct a meeting with construction contractors prior to construction and notify USACE two weeks in advance of the meeting.
To comply with the requirements of the Federal Emergency Management Agency regarding implementation of the National Flood Insurance Act, Flood Disaster Protection Act, National Flood Insurance Reform Act, Federal Executive Orders 11988 and 11990, and to comply with related state statutes and local floodplain development ordinances, proponents of construction projects in special flood hazard areas must coordinate in advance with the local floodplain administrator and obtain a floodplain development permit prior to design approval;

- Standard emergency condition for the discovery of cultural resources; and
- Standard emergency condition for the discovery of threatened and endangered species.

Therefore, it is recommended that an Environmental Determination be issued.