

Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave.
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Phone (512) 463-7847, Fax (512) 475-2053

MEMORANDUM

TO: File

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

DATE: July 12, 2016

SUBJECT: Canyon Regional Water Authority, Guadalupe County
Environmental Determination
Wells Ranch Phase II – Well Field and Transmission Line Project
Project 11: Crystal Clear Transmission Line Project
State Water Implementation Fund for Texas: Project 51005 (L15006)

The attached memorandum contains the staff's views regarding the environmental soundness of the pipeline components of the Wells Ranch Phase II – Well Field and Transmission Line Project (Project 11: Crystal Clear Transmission Line Project) proposed by Canyon Regional Water Authority (Authority) in Guadalupe County, Texas. This project will utilize planning, design, and construction funds from loan L15006 from the State Water Implementation Fund for Texas (SWIFT). The Texas Water Development Board (TWDB) committed this loan on July 23, 2015, in the amount of \$42,000,000. The Authority closed the loan on December 10, 2015.

This transmission pipeline will be constructed as part of a larger water supply expansion project, including new wells; new collection lines; water treatment plant expansion; new tanks; new pumps; new waterlines; ancillary electrical, mechanical, and controls equipment; rights-of-way; and other items necessary and incidental to completion of the project. Although the loan is intended to fund a number of project components, the present Environmental Determination solely pertains to the installation of the Crystal Clear Transmission Line Project. Specifically, the Authority proposes to install approximately 23,500 linear feet (4.45 miles) of 24-inch-diameter water transmission pipeline from just southwest of State Highway 46, approximately 0.2 mile northwest of the State Highway 46 and Avery Parkway intersection to south of the Farm-to-Market Road 758 and Barbarosa Road (FM 107A) intersection (see attached map).

Based on staff's environmental review, no significant adverse environmental impacts should result from the proposed project discussed in the attached Environmental Determination. As required by 31 Texas Administrative Code § 363.14, full consideration has been given to the views and comments of the requisite regulatory agencies.

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	:	Jeff Walker, Executive Administrator

Based on this review, the following conditions have been developed to ensure that the TWDB-funded project is environmentally sound and will not have any adverse impacts on the quality of the human environment:

- In order to comply with the Federal Migratory Bird Treaty Act, vegetation clearing shall be scheduled to occur outside of the March to August nesting season; if clearing must occur during nesting season, nest surveys shall be conducted prior to clearing. If nests are observed during surveys, an area of buffer vegetation no less than 25 feet in all directions shall remain around the nest until the young have fledged. If there are abandoned nests in the area, these nests shall be removed to prevent reoccupation;
- 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 conditions, the specified project elements above are environmentally sound and design funds may be released once all other requirements are satisfied.

Enclosure

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

FROM: Lauren Dill, Environmental Reviewer, Team 6 (Regions M and N) 

DATE: July 12, 2016

SUBJECT: Environmental Summary
Canyon Regional Water Authority, Guadalupe County
Wells Ranch Phase II – Well Field and Transmission Line Project
Project 11: Crystal Clear Transmission Line Project
State Water Implementation Fund for Texas: Project 51005 (L15006)

Pursuant to the environmental assessment requirements of 31 Texas Administrative Code § 363.14, I have conducted a review of the Wells Ranch Phase II – Well Field and Transmission Line Project (Project 11: Crystal Clear Transmission Line Project) proposed by Canyon Regional Water Authority (Authority) in Guadalupe County, Texas. This project will utilize planning, design, and construction funds from loan L15006 from the State Water Implementation Fund for Texas (SWIFT). The Texas Water Development Board (TWDB) committed this loan on July 23, 2015, in the amount of \$42,000,000. The Authority closed the loan on December 10, 2015.

Purpose and Need¹

The Authority consists of eleven public water supply entities and one public water system wholesale customer, stretching over six Central Texas counties. The Authority's legislated purpose is to develop water supply sources for its member entities. Member entities include the Cities of Cibolo, La Vernia, and Marion, Texas, as well as local utilities that provide water to the Cities of San Marcos and Seguin, Texas, and parts of Guadalupe and eastern Bexar Counties. San Antonio Water System is also a wholesale customer. Central Texas is experiencing rapid population growth, and as referenced in the South Central Texas Regional Water Planning Group (Region L) Water Plan (May 2015), the aggregate populations of the areas served by the Authority are expected to more than double between 2015 and 2060. As also discussed in the Region L Water Plan, the projected water needs (the difference between available supply and anticipated demand) are expected to grow from 6,094 acre-feet in 2020 to 20,835 acre-feet in 2070. The Authority's Wells Ranch Project has been included in the TWDB State Water Plan as an important water management strategy for Region L in 2007, 2012, and 2016. The multi-year

¹ Canyon Regional Water Authority (June 2016). *Environmental Data Form for the Crystal Clear Transmission Line Project* (Prepared by SWCA Environmental Consultants). Received by TWDB July 1, 2016.

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and phased project will increase and diversify the Authority's water supply sources with a groundwater alternative.

The Crystal Clear Transmission Line is one of the pipeline components of the Wells Ranch Phase II Water Supply Project that is necessary in the development of an additional 7,400 acre-feet per year of groundwater from the Carrizo and Wilcox Aquifers to support the water supply needs of several of the Authority's member entities, including Crystal Clear Special Utility District (SUD).

The Crystal Clear Transmission Line will transport additional water supply to the Crystal Clear SUD, as well as provide a direct connection to the Authority's existing water supply system north of the Dunlap Water Treatment Plant (WTP). This reinforcing connection in the water supply systems will improve overall system reliability and operational flexibility.

Background

The Authority was created by the Legislature in 1989 and is comprised of eleven member entities: Crystal Clear Special Utility District, East Central Special Utility District, Springs Hill Water Supply Corporation, Green Valley Special Utility District, County Line Special Utility District, Maxwell Water Supply Corporation, Martindale Water Supply Corporation, and the Cities of Marion, Cibolo, Converse, and LaVernia, Texas. The Authority's governing board consists of two voting members from each of the member entities.

The Authority's Wells Ranch Supply Project is a two-phased groundwater supply project utilizing groundwater from the Carrizo and Wilcox Aquifers in Guadalupe and Gonzales Counties as an alternative to Edwards Aquifer production. Phase I began operation in 2009 and resulted in the construction of a 5-million-gallon-per-day water treatment facility, a well field that can produce approximately 5,200 acre-feet per year, ground storage tanks and booster pump stations, and approximately 100,000 feet of 24- and 30-inch water transmission pipeline for the member entities.

The requested SWIFT funding will be used to complete Phase II of the groundwater supply project. Upon completion of the proposed project, the Authority will have a total production capacity of approximately 13,000 acre-feet per year.

Project Description

The proposed Project 11: Crystal Clear Transmission Line Project is located in northwestern Guadalupe County, generally between State Highway 46 and Farm-to-Market Road 758, approximately 4 miles west of Geronimo, Texas. The proposed project area is approximately 4.45 miles in length and 50 feet wide (approximately 27.0 acres) (see attached map). The project consists of the installation of approximately 23,500 linear feet of a new 24-inch-diameter water main pipeline within the Authority's existing easements and private property. Installation of the pipeline would require trenching and boring of a 30-foot-wide permanent easement, with a 20-foot-wide temporary construction easement. Trenching will be 7 to 8 feet deep, while bore pits

will be 8 to 10 feet deep. The total estimated project cost for this component is \$4,867,000. The planning, design, and construction phases of the proposed project will be funded by the TWDB.

Reviews by Regulatory Agencies and Resulting Conditions

On the Authority's behalf, SWCA Environmental Consultants (SWCA) coordinated with the following federal and state regulatory agencies: Texas Parks and Wildlife Department (TPWD), Wildlife Division, Wildlife Habitat Assessment Program; United States Army Corps of Engineers (USACE), Fort Worth District; Texas Historical Commission (THC); and United States Fish and Wildlife Service (USFWS), Austin Ecological Services Field Office. In addition, the National Flood Insurance Program Liaison for Region VI and Guadalupe County Floodplain Administrator were given an opportunity to review the Environmental Data Form. No adverse comments were received. A summary of the correspondence has been provided below.

Texas Parks and Wildlife Department, Wildlife Division, Wildlife Habitat Assessment Program
The TPWD reviewed the proposed project and provided a response dated March 16, 2016 (TPWD Project Number 36230), with two recommendations for the proposed project regarding migratory birds and state fish and wildlife resources. The TPWD received a written response from the Authority's environmental consultant dated May 17, 2016, providing responses to the TPWD's initial comments. A summary of the response furnished to TPWD is provided below.

- **Migratory Birds:** The Authority will strive to conduct vegetation clearing outside of the March to August nesting season. If construction schedules necessitate clearing during nesting season, the Authority will retain a qualified biologist to conduct nest surveys prior to vegetation clearing. If active nests are observed during surveys, a 25-foot radius of buffer vegetation will be maintained around the active nests until the young have fledged. Any abandoned nests in the construction area will be removed to prevent reoccupation.
- **State Fish and Wildlife Resources:** The Authority proposes to minimize impacts to wildlife species through the following actions: minimizing woody vegetation clearing within utility easements, using appropriate erosion control practices, and revegetating disturbed areas with a native grass/forb seeding mix. In addition, the Authority will retain a qualified biologist to conduct field surveys to look for "Species of Greatest Conservation Need" and other wildlife species prior to construction; if found, non-mobile species will be properly relocated outside of the proposed construction area. Construction crews will be informed to avoid impacts to any wildlife species encountered in the construction area, and to inform the project owner if wildlife species are observed that may require relocation from the project site.

United States Army Corps of Engineers, Fort Worth District

The USACE provided a response letter dated March 14, 2016 (Project Number SWF-2016-00059), stating that based on the description of the proposed project and information available to the agency, the USACE has determined that the proposed project will not involve activities subject to the requirements of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act; therefore, the proposed project will not require Department of the Army authorization pursuant to Section 404 and/or Section 10.

Texas Historical Commission

SWCA conducted a survey of the proposed project area under Antiquities Code Permit #6678 with investigations occurring in October 2013 and October 2014. SWCA's report (Ward 2015) concluded that the proposed project will have no adverse effects on cultural resources. The THC provided concurrence with SWCA's assessment in the form of a letter of concurrence dated December 18, 2014.

The SWIFT loan is conditioned to read that if archeological sites are discovered during construction, work will cease immediately in that area and the Authority will notify the THC and the TWDB of the discovery. The THC and the TWDB will then proceed in accordance with the regulations of the Advisory Council on Historic Preservation (36 CFR Part 800) prior to taking any action which would affect the cultural resources.

United States Fish and Wildlife Service, Austin Ecological Services Field Office

The USFWS provided a response in an email dated February 23, 2016 (Consultation No. 02ETAU00-2016-TA-0217), indicating that the proposed project will have no effect on federally listed threatened or endangered species.

Local Floodplain Administrator and National Flood Insurance Program Liaison

Both the local floodplain administrator for Guadalupe County and Region VI Liaison for the National Flood Insurance Program were given the opportunity to review the proposed project in letters dated February 6, 2015. The Region VI Liaison for the National Flood Insurance Program responded with a letter dated February 17, 2016, requesting that the community's floodplain administrator be contacted for review and possible permit requirements for the proposed project. According to the response from the Guadalupe County Floodplain Administrator in an email dated June 7, 2016, no permits will be required for the proposed project.

Conditions and Recommendation

Full consideration has been given to the views and comments of the requisite regulatory agencies. Based on a detailed environmental review consistent with 31 Texas Administrative Code § 363.14, the following conditions have been developed in order to ensure that this TWDB-funded project is environmentally sound and will not have any adverse impacts on the quality of the human environment:

- In order to comply with the Federal Migratory Bird Treaty Act, vegetation clearing shall be scheduled to occur outside of the March to August nesting season; if clearing must occur during nesting season, nest surveys shall be conducted prior to clearing. If nests are observed during surveys, an area of buffer vegetation no less than 25 feet in all directions shall remain around the nest until the young have fledged. If there are abandoned nests in the area, these nests shall be removed to prevent reoccupation;
- 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 conditions, I recommend that the Executive Administrator find the specified project elements above to be environmentally sound and that design funds be released once other requirements are satisfied.

