

bore pits will be 8 to 10 feet deep. The overhead electric power and roadway will be located within the easements (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.

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

- Compliance with the terms and conditions of United States Army Corps of Engineers (USACE) Nationwide Permit 12 for Utility Line Activities (USACE Project Number SWF-2016-00214);
- 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 construction schedules necessitate clearing during nesting season, a qualified biologist will conduct nest surveys prior to vegetation clearing. If active nests are observed during surveys, a minimum 25-foot-radius buffer of vegetation will be maintained around the active nests until the young have fledged;
- In order to comply with Parks and Wildlife Code, Section 68.015, a qualified biologist will conduct a pre-construction survey during the July to August timeframe, when horned lizards are active, to determine if Texas horned lizards (*Phrynosoma cornutum*) are present on, or directly adjacent to, the project area. The locations of harvester ant (*Pogonomyrmex barbatus*) nests will be noted, if applicable, during the field survey. Should Texas horned lizards be observed on or adjacent to the project area, the Authority's biological consultant will contact the TPWD Habitat Assessment Program, Wildlife Division Office to develop plans to relocate them away from the proposed project activities;
- 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

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

FROM: Lauren Dill, Environmental Reviewer 

DATE: September 12, 2016

SUBJECT: Environmental Summary
Canyon Regional Water Authority, Gonzales County
Wells Ranch Phase II – Well Field and Transmission Line Project
Northeast and Southeast Carrizo Well and Well Field Project
State Water Implementation Fund for Texas: Project 51005 (L15006)

Pursuant to the environmental assessment requirements of 31 Texas Administrative Code (TAC) § 363.14, I have conducted a review of the Wells Ranch Phase II – Well Field and Transmission Line Project (Northeast and Southeast Carrizo Well and Well Field Project) proposed by Canyon Regional Water Authority (Authority) in Gonzales 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 2011 South Central Texas Regional Water Planning Group (Region L) Water Plan, 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 a

¹ Canyon Regional Water Authority (June 2016). *Environmental Data Form for the Northeast and Southeast Carrizo Well and Well Field Project* (Prepared by SWCA Environmental Consultants). Received by TWDB June 15, 2016. The EDF is complete with the final supplementary materials submitted to the TWDB on August 22, 2016.

recommended water management strategy for Region L in 2007, 2012, and 2016. The multi-year and phased project will increase and diversify the Authority's water supply sources with a groundwater alternative.

Over a period of several years, the Authority has leased a total of approximately 13,000 acre-feet per year of Carrizo and Wilcox Aquifers water from land owners in Guadalupe and Gonzales Counties, and has permitted the leased groundwater from the regulating agency in each of the counties.

In 2009, the Authority began initial Phase I groundwater production and delivery of 5,200 acre-feet per year from the Wells Ranch well field. The final build-out of the Wells Ranch Project will result in a 13,000 acre-feet per year groundwater production and delivery system.

The proposed Carrizo Aquifer wells and well field collection system associated with the Wells Ranch Phase II - Northeast and Southeast Carrizo Well and Well Field Project will provide an additional 4,400 acre-feet per year of water supply that is contracted to several of its member public water supply entities.

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 member entities.

The 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 Wells Ranch Phase II – Northeast and Southeast Carrizo Well and Well Field Project proposes to install five additional Carrizo Aquifer wells and a well field collection

system. Each will consist of the following:

- Each of the five wells will be located on an approximately one-acre site. Each site will include the well; well pump and motor; a well pad; above and below ground piping and valves; electrical, instrumentation, and controls equipment; a gravel driveway and parking pad; security fencing; and overhead electrical supply.
- The well field collection system will consist of approximately 20,000 feet of pipeline with sizes ranging from 12 to 24 inches in diameter. The pipeline will be installed within Authority-owned easements, crossing several private properties. Installation of the pipeline will require trenching and boring within the easement. Trenching impacts will be 7 to 8 feet deep, while bore pits will be 8 to 10 feet deep. Also, overhead electric power and a 20-foot all-weather gravel roadway will be located within the easement.

The project area is located in western Gonzales County north of the City of Leesville, Texas, approximately 1.5 miles north of the intersection of County Road 102 and State Highway 80. The planning, design, and construction phases of this 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 the United States Fish and Wildlife Service (USFWS), Austin Field Office. In addition, the National Flood Insurance Program Liaison for Region VI and the Gonzales 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 July 11, 2016 (Project Number 36764), with recommendations for the proposed project regarding federal laws, state laws, and rare species. The TPWD received a written response from the Authority's environmental consultant dated July 22, 2016, providing responses to the TPWD's initial comments. Based on that response, the TPWD determined, in an email dated August 10, 2016, that all recommendations provided by TPWD have been adequately addressed and coordination is complete. A summary of the response furnished to TPWD is provided below.

- **Federal Migratory Bird Treaty Act:** The Authority will strive to conduct vegetation clearing outside of the March to August nesting season. If

- construction schedules necessitate clearing during nesting season, a qualified biologist will conduct nest surveys prior to vegetation clearing. If active nests are observed during surveys, a minimum 25-foot radius of buffer vegetation will be maintained around the active nests until the young have fledged.
- **State Parks and Wildlife Code, Section 68.015:** A qualified biologist will conduct a pre-construction survey to determine if Texas horned lizards (*Phrynosoma cornutum*) are present on the project site or directly adjacent to the construction area. The survey will be conducted during the July to August timeframe, when horned lizards are active. The locations of harvester ant (*Pogonomyrmex barbatus*) nests will be noted, if applicable, during the field survey. Should Texas horned lizards be observed in or adjacent to the project area, the Authority's biological consultant will contact the TPWD Habitat Assessment Program, Wildlife Division Office to develop plans to relocate them away from the proposed project activities.
 - **Rare Species:** 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 an authorization letter dated August 16, 2016 (Project Number SWF-2016-00214) indicating that the project will involve activities subject to the requirements of Section 404 of the Clean Water Act and that the project appears to qualify for a Nationwide Permit 12 for Utility Line Activities. Provided that the permittee complies with all the terms and conditions therein, the project may proceed. The Nationwide Permit is valid until March 18, 2017. Furthermore, activities that have commenced, or are under contract to commence, in reliance on a nationwide permit will remain authorized provided the activity is completed within 12 months of the date of the nationwide permit's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5(c) or (d).

Disturbed areas will be returned to pre-construction contours and restored with primarily native herbaceous vegetation, and best management practices will be used to minimize sediment transport.

Texas Historical Commission

SWCA conducted a survey of the proposed project area under Antiquities Permit Number 7418 with investigations occurring in March 2016. SWCA's report (Ward 2016) concluded that no historic properties will be affected by the proposed project. The THC provided concurrence with SWCA's assessment in the form of a stamped approval dated July 1, 2016 (no tracking number provided).

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 was given the opportunity to review the proposed project for compliance with the Endangered Species Act. No response was received by the agency.

The SWIFT loan is conditioned to read that if threatened or endangered species are encountered during construction, work will cease immediately and the Authority will notify TWDB staff, TPWD, and the USFWS. Subsequent to notification, mitigation measures will be taken in accordance with the Endangered Species Act of 1973, as amended.

Local Floodplain Administrator and National Flood Insurance Program Liaison
Both the local floodplain administrator for Gonzales County and the Region VI Liaison for the National Flood Insurance Program were given the opportunity to review the proposed project in letters dated June 3, 2016. The Region VI Liaison for the National Flood Insurance Program responded with a letter dated June 10, 2016, requesting that the community's floodplain administrator be contacted for review and possible permit requirements for the proposed project. The Gonzales County Floodplain Administrator issued the Floodplain Development Permit, dated August 17, 2016.

Conditions and Recommendation

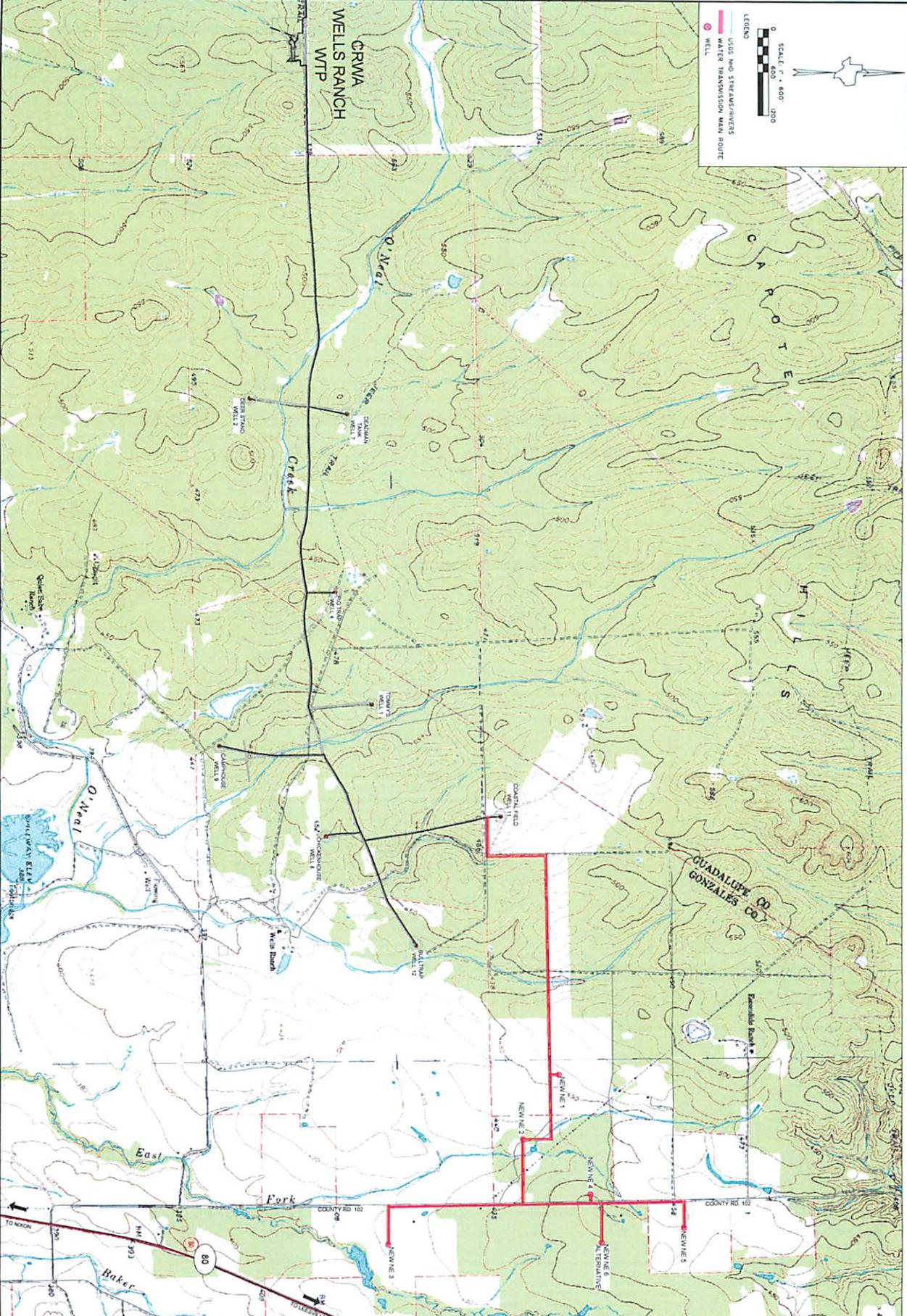
Full consideration has been given to the views and comments of the requisite regulatory agencies. Based on a detailed environmental review consistent with 31 TAC § 363.14, the following conditions have been developed in order to ensure that this TWDB-funded project is environmentally sound and will not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

- Compliance with the terms and conditions of United States Army Corps of Engineers Nationwide Permit 12 for Utility Line Activities (USACE Project Number SWF-2016-00214);
- 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 construction schedules necessitate clearing during nesting season, a qualified biologist will conduct nest surveys prior to vegetation clearing. If active nests are observed during surveys, a minimum of 25-foot radius of buffer vegetation will be maintained around the active nests until the young have fledged;
- In order to comply with Parks and Wildlife Code, Section 68.015, a qualified biologist will conduct a pre-construction survey during the July to August timeframe, when horned lizards are active, to determine if Texas horned lizards

(Phrynosoma cornutum) are present on, or directly adjacent to, the project area. The locations of harvester ant (*Pogonomyrmex barbatus*) nests will be noted, if applicable, during the field survey. Should Texas horned lizards be observed on or adjacent to the project area, the Authority's biological consultant will contact the TPWD Habitat Assessment Program, Wildlife Division Office to develop plans to relocate them away from the proposed project activities;

- 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.



SCALE 1" = 400'

0 400 800 1200

LEGEND

- PROPOSED WATER TRANSMISSION MAIN ROUTE
- WELL

CANYON REGIONAL WATER AUTHORITY
NORTHEAST & SOUTHEAST CARRIZO WELL FIELD
PROJECT

USGS TOPOGRAPHIC MAP

SHEET NO. 1
OF 1 SHEETS

RIVER CITY ENGINEERING
Civil, Environmental and Surveying
Texas Engineering Firm # 46861 - Texas Survey Firm 024339

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ALLEN, TEXAS 75002-7047 NEW BRUNSWICK, TEXAS 76078
PH 817-422-3338 FAX 817-464-6702 PH 820-628-2868 FAX 820-628-3871

NO.	REVISION	APP'D	DATE

DESIGN BY: P.A.L.
DRAWN BY: C.Y.
CHECKED BY: P.A.L.

DATE: 5/10/2016
PROJECT NO: 6384-85