

RECLAMATION

Managing Water in the West

**FINDING OF NO SIGNIFICANT IMPACT
AND
FINAL ENVIRONMENTAL ASSESSMENT
FOR
El Paso County Water Improvement District Number One, Canal,
Structure, and Improvements Project**



**U.S. Department of the Interior
Bureau of Reclamation
Albuquerque Area Office
Environment Division
Albuquerque, New Mexico**

May 2009

MISSION STATEMENTS

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Front Cover Photo Caption – Photo showing Riverside Canal at the Partidor, El Paso, Texas, April 8, 2003

U.S. Department of the Interior

BUREAU OF RECLAMATION


Albuquerque Area Office
Albuquerque, New Mexico

Finding of No Significant Impact

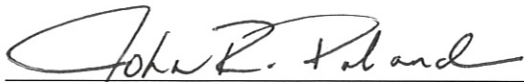
**El Paso County Water Improvement District Number One, Canal,
Structure, and Improvement Project, El Paso County, Texas**



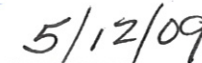
Manager, Environment Division



Date



Area Manager, Albuquerque Area Office



Date

AAO-07-004

FONSI Number

BACKGROUND

The El Paso County Water Improvement District Number One (District) of Texas established in 1917, provides water by way of the Riverside Canal (Canal) to approximately 50% of the raw water supply of the City of El Paso (City) and to supply irrigation water to over 45,000 acres of irrigable land. An evaluation of the Canal was performed to identify weaknesses that could be corrected. These weaknesses include seepage and evaporation losses, and excess bypass waste flows from check structures. The proposed work would be partially federally funded in cooperation with Reclamation under a Memorandum of Agreement (MOA, see appendix A). In addition, authorization and requirements for funding the project are written in the Lower Rio Grande Valley Water Resources Conservation and Improvement Act of 2000 (P.L. 106-576) (The Act).

SUMMARY OF THE PROPOSED ACTION

Due to excessive water losses found in the Canal as a result of evaluations, the District proposes to reconstruct and then concrete line the first 3 miles of the canal, hereinafter referred to as the Project. In addition, the District proposes to replace leaky gates, and check structures which would and correct inefficient deliveries.

The proposed Project lies within El Paso County, Texas as indicated in Figure 1 (Page 2 of the EA). The existing components of the segment of the Canal include approximately 16,000 feet of earthen-lined canal with bottom widths varying from 45 to 90 feet. The proposed Canal (see Figure 2, section A, B, and C on Page 9 of the EA) begins at the downstream end of the existing American Canal. The Project is divided into three segments: A, B, and C. Reach B connects to the middle of Reach, A at a point just downstream of the Wastewater Treatment Plant Bridge. Reach A terminates at the Partidor Check Structure. Reach C extends from the Partidor Check structure to the Wasteway One Check Structure.

Canal sections A, B, and C would be concrete lined with side slopes of 1:5:1 and a depth of about 11 feet. Each is designed to carry a maximum flow of 1590 cfs while maintaining about 4 feet of total freeboard. Section A would have a length of 7630 feet and a bottom width of 14 feet. Section B would have a length of 4000 feet and a bottom width of 18 feet. Section C would have a length of 4370 feet and a bottom width of 28 feet. The Partidor Check, Franklin Check, and the Wasteway One Check Structures would be replaced with new efficient Structures.

No additional roads would be required; therefore construction would occur within the existing right-of-way.

ENVIRONMENTAL IMPACTS RELATED TO THE RESOURCES OF CONCERN

As a result of analyzing the effects of the proposed action in the EA, the following summarizes the reasons why there would be a Finding of No Significant Impact:

Wildlife

The U.S. Fish and Wildlife Service (Service) has stated in a letter (see attached Appendix A) that habitat for federally listed threatened and endangered wildlife species is not known to exist on or near the proposed project site, and impacts to the species by the proposed Project are not anticipated (Service letter page 36 of Appendix A).

The Pecos River Muskrat known to exist in canals similar to the Canal was listed by the Texas Parks and Wildlife (TPW) as a species of concern. The Pecos River Muskrat is not federally listed as threatened or endangered. A presence or absence survey was conducted by the TPW within the proposed Project area and the adjacent Rio Bosque Wetlands Park (Park). The survey identified muskrat fecal matter in the Canal and the Park, however, the fecal matter was not specifically identified with the Pecos River Muskrat. Construction activities would only temporarily displace muskrat within the proposed Project site. After construction, the species would return to areas of the canal not lined with concrete or relocate to the adjacent Park, the Rio Grande or nearby unlined canals.

Although construction activities may scare existing wildlife away temporarily, most animal species in the Project area would be able to return after completion. Like the Pecos River Muskrat, other wildlife species would likely relocate to other easily accessible habitat nearby in the Park, the Rio Grande or nearby unlined canals.

Cultural Resources

The Canal is included on the National Register of Historic Places (NRHP). However, the Texas Historical Commission (THC) determined that the proposed improvements to the Canal would cause no adverse effects.

The Ysleta del Sur Pueblo (Pueblo) has designated the Park as a Traditional Cultural Resource. The resources are traditional plants that are necessary for the Pueblo to carry on their cultural events. The lining of the canal would not affect the traditional plants in the Park because there are other sources of water to help sustain the vegetation in the Park. The District has made provisions to enhance the establishment of wetland species in the Park, which include drilling a well for year round use, providing a turnout at the Bustamante Wastewater Treatment Plant and helping the "Friends of the Bosque (Friends)" acquire water rights. Water rights would provide the Friends an opportunity to apply for an additional turnout for water during the irrigation season that would benefit the Park.

Water Resources

The groundwater level of the area under the Park is controlled by the elevation of the bottom of the Rio Grande, the Riverside Intercepting Drainage Canal, and the River Intercepting Drainage Canal. Currently, the groundwater level is greater than the bottom elevation of the drainage canals, and therefore the groundwater level is not controlled by the amount of seepage from the Canal. As long as these drains have flow, the elevation of the bottom of the drains controls the groundwater level in the Park area.

Furthermore, when excess water is available the District has voluntarily made treated effluent water available to University of Texas El Paso (UTEP) for application on the lands of the Park. Typically, approximately 45 cfs of water is provided to the Park from October to February of each year. This equals a volume greater than 10,000 acre-feet per year which exceeds by several times the amount of water that recharges the alluvium aquifer as a result of seepage from the portion of the Canal adjacent to the Park. Any decrease in the seepage from the Canal is more than offset by the application of water in excess to the plant needs during the winter. Much of this excess water infiltrates into the alluvium aquifer and will offset any reduction in seepage.

The UTEP operates the Park. UTEP or any other entity has several options for obtaining water during the summer months to help address plant sustainability. The City owns the land and the associated water rights associated with the Park. The City can on a temporary or permanent basis assign rights that would allow UTEP to order and receive irrigation water during the summer months. The construction of the proposed conservation project will have no effect or impact on status of the water rights associated with the park. In addition to obtaining water or water rights from the City, UTEP has received donations towards construction and operation of an irrigation well in the alluvium aquifer. During the drought of 2003 and 2004 many of the alluvium wells were operated with little decline in the water levels in the alluvium aquifer. The proposed Project will have no impact on UTEP alternatives for obtain irrigation water for use in sustaining plant life during the summer.

As mentioned in the Axiom-Blair report (See Appendix B) and above, the groundwater level in the region of the Park is controlled by elevation of the water flowing in the nearby drainage canals and not by the amount of water that seeps from the Canal. The amount of water that recharges the Hueco Bolson Regional Aquifer (Hueco) must flow through the clay confining layer at the bottom of the alluvium aquifer, and varies from location to location. However, in general the amount of recharge to the Hueco from the alluvium aquifer in the flood plain of the Rio Grande is small. Furthermore, because of the fluvial origins of the alluvium aquifer, the vertical conductivity is estimated to be only 1 to 5% of the horizontal conductivity. Any decrease in the groundwater elevation in the Park will have minimal effect on recharge (vertical flow of water) and cause water to flow horizontally towards the Park from the surrounding portions of the alluvium aquifer. UTEP's recharging of the alluvium aquifer using treated effluent offsets any possible reduction in recharge to the Hueco by keeping the groundwater levels in the alluvium aquifer greater than the bottom elevation of the nearby drainage canals. The proposed conservation Project will have no or negligible reduction in the recharge of the Hueco from the alluvium aquifer in the vicinity of the Park.

Wetlands

The emergent wetland and the Park was planted with riparian vegetation that is being enhanced by water donated by the District during the non-irrigation season from a wastewater treatment plant nearby. The Project has been identified as a source of water (contingent upon water rights) to enhance the establishment of the emergent wetland. In addition, the District has made provisions for the Friends and the UTEP to acquire water rights so that they may apply for a turn out for additional water during the irrigation season.

If seepage were to be eliminated or significantly reduced as a result of lining the Canal with concrete, the Park would not be affected. Even though seepage would be reduced, the aquifers would maintain the groundwater level much the same as before lining of the Canal. Pump tests have shown that the rate of recovery from pumping wells installed within a few feet of the Canal is very high (Axiom-Blair, 2007). Since recovery rate of water is very high, this shows that the aquifers would rapidly replace any water lost from Canal seepage.

The emergent wetland and the Park were planted with riparian vegetation that is being enhanced by water donated by the District during the non-irrigation season. In addition, District has made provisions to enhance the establishment of wetland species in the Park, which include drilling a well for year round use, providing a turnout at the Bustamante Wastewater Treatment Plant, and helping the Friends acquire water rights. Water rights would provide the Friends an opportunity to apply for an additional turnout for water during the irrigation season that would enhance riparian and emerging wetland species.

The Park is identified by the Pueblo as a Traditional Cultural Resource.

Vegetation

With in the proposed Project site, little vegetation exists as a result of being disturbed from the operation and maintenance of the Canal. Lining the Canal with concrete would eliminate existing vegetation. However, after construction, plants are expected to be rapidly and naturally reintroduced to open soil areas from adjacent undisturbed plants.

Environmental Justice

The Proposed Action would result in a variety of environmental effects that do not disproportionately affect minority populations or low-income communities. The Pueblo is concerned about potential effects that the Project may have on the Park, which is a Traditional Cultural Resource of special significance to the Pueblo. If the Project were to impact the Park, then that would be considered a disproportionate impact to a minority population. However, because water level within the Park is influenced by groundwater level which is not affected by canal seepage, the loss of seepage will have no effect on the Park. Thus, no environmental justice implications are anticipated.

Indian Trust Assets

Although these are resources of special significance to the Pueblo, there are no ITAs (Assets held in trust by the Federal Government) within the Project area or within the vicinity to be affected.

Air Quality and Noise

During the reconstruction of the Canal and the placement of the new check structures, the construction equipment, as trucks and bulldozers, will cause an increase to the existing dust (PM10) and noise levels: dust from the unlined Canal and noise from nearby industrial facilities.

Nearby houses and others will be impacted by this increase in dust and noise, which will return to normal levels after construction ends.. During the Project, the times of construction would be restricted to avoid interference with religious ceremonies of the Pueblo.

ENVIRONMENTAL COMMITMENTS

- Construction activities would be scheduled to avoid conflicts with religious ceremonies of the Pueblo.
- Reclamation is committed to ongoing government to government relations with the Pueblo.
- A letter from the THC can be found at Appendix A. The letter lists a few conditions if the project were to be implemented.

The THC requires that the section of the Canal that would be lined should be the same width (or as close to the same width as possible) as the current historic canal. In addition, the THC requires that a representative section of the canal shall be maintained in its original appearance and condition in the event of any future improvements to the Canal.

- Should evidence of possible scientific, prehistorical, historical, or archeological data be discovered during the course of this action, work shall cease at that location and the Area archaeologist shall be notified by phone immediately, with the location and nature of the findings. Care shall be exercised so as not to disturb or damage artifacts or fossils uncovered during operations, and the proponents shall provide such cooperation and assistance as may be necessary to preserve the findings for removal or other disposition by the Government.

Any person who knows or has reason to know that he or she has inadvertently discovered human remains on Federal or tribal lands, must provide immediate telephone notification of the inadvertent discovery, with written confirmation, to the responsible Federal agency official with respect to Federal lands, and, with respect to tribal lands, to the responsible Indian tribe official. The requirement is prescribed under the Native American Graves Protection and Repatriation Act (P.L. 101-601; 104 Stat. 3042) of November 1990 and National Historic Preservation Act, Section 110(a)(2)(E)(iii) (P.L. 102-575, 106 Stat. 4753) of October 1992.

COORDINATION

Consultation took place with the U.S. Army Corps of Engineers, TPW, the Service, Friends, Pueblo, THC, UTEP, District, and several private individuals who attended the public meeting.

A public meeting was held September 10, 2003 to present the proposed Project and receive comments from those who attended.

Additional meetings have taken place with the Friends, to share Project information, identify their concerns about the Project, and describe how the Project would not affect groundwater or the Park's vegetation.

The following is a series of technical and formal meetings undertaken with the Pueblo as part of the government to government process:

- September 25, 2003, to brief the Governor and his staff regarding the proposed Project. During that time, the Pueblo provided their concerns regarding air quality and noise during religious ceremonies, and impacts of lining the Canal. They requested that construction be scheduled to avoid conflicts with religious ceremonies.
- May 24, 2004, follow-up meeting in the field with the War Captain to discuss sacred plants.
- July 28, 2004, to continue government to government consultation with the Governor. This discussion included sacred plants and issues regarding potential impacts to the Park.
- August 1, 2007, to continue government to government consultation with the Governor. It had been three years since communication took place regarding the proposed Project, and therefore helped to reconfirm the Pueblo's concerns and issues. Several informal field trips were conducted with the Pueblo to consult further and understand their needs.
- March 19, 2008, a meeting to brief Governor Paiz and his staff regarding the proposed Project. The Lt. Governor, War Captain, and Environmental Manager were present.
- May 22, 2008, to continue government to government consultation with the new Governor Paiz and his staff. The meeting centered around Pueblo consultation policies and the draft EA.
- February 28, 2009, a meeting with Governor Paiz, the District, and Reclamation personnel to update the progress of the Project and EA.
- Previous issues and letters submitted by the Pueblo since 2003 have been addressed through all the meetings listed above and in the final EA for the Project.
- April 15, 2009, letter from the Governor to Reclamation listing comments after additional review of another draft revision of the EA (see Appendix C in the letter addressing comments).

CONCLUSION

In accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, and based on the analysis in the EA, Reclamation has determined that the Proposed Action would not result in a significant impact on the human environment and does not require the preparation of an Environmental Impact Statement.