



**DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, ALBUQUERQUE
CORPS OF ENGINEERS**

Section 404(b)(1) analysis

PROJECT NAME: Farmers Mutual Ditch, San Juan County, New Mexico

This document constitutes determination of compliance with the 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material, Public Interest Review, and Statement of Findings.

1.0 Authority

This analysis fulfills requirements of Section 404 of the Clean Water Act (33USC 403). (33 CFR Part 325 Appendix B, 40 CFR 230.5(c), 40 CFR 1501, and RGL 88-13). An evaluation of alternatives is required under NEPA for all jurisdictional activities. NEPA requires discussion of a reasonable range of alternatives, including the no action alternative, and the effects of those alternatives. An evaluation of alternatives is required under the Section 404(b)(1) Guidelines for projects that include the discharge of dredged or fill material to waters of the United States. Under the Section 404(b)(1) Guidelines, practicability of alternatives is taken into consideration and no alternative may be permitted if there is a less environmentally damaging practicable alternative. In order to be practicable, an alternative must be available, achieve the overall project purpose (as defined by the Corps) and be feasible when considering cost, logistics and existing technology. The U.S. Army Corps of Engineers, Albuquerque District (USACE) would conduct the project under Section 1113 of the Water Resources Development Act of 1986, which authorizes the Acequia Rehabilitation Program for the restoration and rehabilitation of irrigation ditch systems in New Mexico.

2.0 Proposed Project

The USACE, Albuquerque District, on behalf of the Farmers Mutual Ditch Association, is proposing to install pipe along two miles or less of the ditch alignment, converting this portion of the ditch from open earthen ditch to piped conveyance.

2.1 Project Description.

As described in the Draft Environmental Assessment circulated for public review from August 14 to September 14, 2020, approximately two miles or less of earthen ditch would be replaced with an irrigation pipe. The two miles are split between a Reach 1 and a Reach 2 (see Figure 1). Installing irrigation pipe would eliminate material eroding into and blocking the ditch and channel blockages from external debris. Pipe provides for more efficient distribution of irrigation water to the users and reduces the current amount of maintenance required to keep the system clear of debris. Additionally, installing pipe would alleviate public safety concerns associated

with open ditches and would lessen the exposure to rockfall hazard for workers maintaining the ditch.

2.1.1 Changes to the proposed project since circulation of the draft Environmental Assessment:

To assure the safety of workers while installing new buried irrigation pipe, work will include “rock scaling,” removal of loose rock and debris in areas determined to present a safety hazard, as shown on the plans. The slopes adjacent to the acequia channel are extremely steep and due to their geological composition pose a potential rockfall hazard to construction workers working within the channel. Prior to the start of construction within the acequia channel, rock scaling will be performed on these rock slopes to remove unstable or potentially unstable rock. Rock scaling will be performed by trained professionals rappelling from the top of the rock slope and using hand tools to dislodge the rocks from the top down in a controlled manner.

The project Geologist has performed multiple field surveys and identified areas along the rock slopes that pose potential risk of rockfall during construction. To reduce this risk, six segments along the Reach 1 alignment of the acequia, having an approximate total length of 2,350 feet, have been identified for rock scaling. After rock scaling activities are completed, a final inspection will be performed by a specialist hired by the Contractor to certify that work can safely begin within the acequia. The displaced rock may be used as fill if suitable or would be collected and hauled offsite.

2.1.2 Specific activity that requires a Section 404(b)(1) analysis:

Conversion of open earthen ditch to pipe is considered construction and does not qualify for exemption under Section 404 of the Clean Water Act Scope of Analysis under NEPA:

The project would be constructed under Section 1113 of the Water Resources Act (WRDA) 1986 (P.L. 99-662). The Acequia Rehabilitation Program of Section 1113 of the WRDA 1986 authorizes and directs the Secretary of the Army:

...to undertake, without regard to economic analysis, such measures as are necessary to protect and restore the river diversion structures and associated canals attendant to the operations of the community ditch and Acequia systems in New Mexico that are declared to be a political subdivision of the State of New Mexico.

The scope of analysis addresses the entire project converting this ditch to a piped conveyance.

2.2 Proposed Project Location:

The project is located west of the City of Farmington along the edge of the San Juan River floodplain in San Juan County, New Mexico (Figure 1).

2.3 Existing Site Conditions:

The existing environment is described in the project Environmental Assessment.

2.4 Project Purpose and Need - for the Public Interest determination:

2.4.1 Project need:

Currently, a portion of Farmers Mutual Ditch that runs along steep, unstable bluffs close to the river is affected by rock and debris slides. In the past, the rock slides have completely filled the irrigation ditch, reducing the water supply to Association members and necessitating frequent, expensive maintenance. The proposed project serves a public need to provide reliable irrigation water to a portion of the San Juan Valley, sustaining local agricultural practices and livelihoods. The proposed project serves a private need to supply irrigation water to individual Ditch Association members. In consideration of the need for the project, analysis would discuss the relevant public interest factors including conservation, wetlands, fish and wildlife values, and water quality.

2.4.2 Basic project purpose:

The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent. The basic project purpose for the proposed project is to construct an irrigation pipeline. The proposed project does not impact special aquatic sites and therefore is not considered water dependent.

2.4.3 Overall project purpose for 404(b)(1) analysis:

The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The overall project purpose for the proposed project is to provide a more reliable irrigation supply and to reduce maintenance costs associated with frequent rockslides impacting the open ditch.

3.0 Public Involvement

A draft Environmental Assessment was circulated for public review from August 14 to September 14, 2020. A Notice of Availability of the draft Environmental Assessment was sent to all interested parties, including appropriate state and Federal agencies. The mailing list is included in Section 6.0 of the project Environmental Assessment.

3.1 Comments Received and Consideration of Comments.

Comments received during the initial public review period are provided in a comment-response table in Section 6 of the Environmental Assessment. Comments and USACE responses from the EA included the following:

3.1.1 Federal Agencies:

<p>USEPA</p>	<p>All Non-Road Engines should be certified as in compliance with EPA Tier 4 regulations found at 40 CFR Parts 89 and 1039, which include new and in-use nonroad compression-ignition engines.</p>	<p>Concur. This requirement will be included in contract specifications.</p>
<p>USEPA</p>	<p>Should any land-clearing activities occur which result in the use of open burning to dispose of woody debris, coordination should be conducted with the New Mexico Environment Department to determine air quality conditions such as atmospheric inversions prior to performing open burning activities, and consider any expected air quality/visibility impacts to Class I Federal Areas identified in 40 CFR Part 81, Subpart D.</p>	<p>Concur. Open burning is not anticipated to occur. Should open burning be used, the project contractor will be required to coordinate with NMED.</p>
<p>USEPA</p>	<p>EPA recommends incorporating a Tribal Consultation Section in the EA with discussion as to how it complied with Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (November 6, 2000), since the project has tribal implications. EPA recommends that the discussion includes, but not limited to any direct, indirect or cumulative adverse impacts associated with cost and tribal trust resources. In addition, EPA recommends that the discussion include tribal concerns and the mitigation measures being addressed.</p>	<p>Concur. Section 6 of the EA, Consultation and Coordination, describes Tribal consultation. We have also added a section specifically addressing Tribal consultation. As an agency of the Department of Defense, we follow the DoD’s American Indian and Alaska Native Policy, which fulfills the requirements of EO 13175. We also adhere to 36CFR800.2, which describes federal agencies’ responsibilities for tribal consultation. Consultation letters were sent to concerned Tribes as described in the DEA. Responses were received from the Navajo Nation and the Southern Ute Tribe, and both responses indicated that there were no cultural resource concerns with the project. There are no known cultural resources or traditional cultural properties concerns in the project APE. Therefore, no mitigation is necessary.</p>
<p>USFWS</p>	<p>The Service concurred with the Corps’ determination of “may affect, is not likely to adversely affect” for the cuckoo and flycatcher based on the rationale and the conservation measures provided in emails and biological effects analysis documents.</p>	<p>Noted; thank you. We affirm that as described in the EA and biological analysis, construction will occur outside the breeding season. Details are provided in the consultation documents (Appendix B).</p>

3.1.2 Tribes:

The Navajo Nation, the Pueblo of San Ildefonso, and the Pueblo of Sandia each indicated that there were no cultural resource concerns with the project. The Southern Ute Indian Tribe (SUIT) indicated a concern regarding a cultural resource site LA 10952 and potential impacts from rock scaling activities. USACE and SUIT have agreed that since the proposed rock scaling activities in the vicinity of that site will occur at a later date and have separate NEPA and NHPA Section 106 documents prepared (for Reach 2) that there is no current concern and that the undertaking described in this document would not have an effect.

3.1.3 State and local agencies:

EMNRD - Forestry Division, Botany Program	Concurred with the Corps' determination that no state or federally listed plants will be affected by the project as proposed	Noted; thank you.
NMDGF (letter of 11 September)	The timing, reseeding efforts, and best management practices incorporated in the Environmental Assessment will help minimize negative impacts to wildlife.	Noted; thank you.
NMDGF (letter of 11 September)	The Department recommends conducting surveys for active burrows or cavities within the project area prior to initiating ground disturbance to avoid negative impacts to burrowing animals. Burrowing Owl (<i>Athene cunicularia</i>) is known to occur within San Juan County and could occur within the project area.	Habitat along the ditch does not appear to be well suited to burrowing owls. The construction will occur outside of the burrowing owl nesting season. If an active burrow is found during construction, the Corps will contact NMDGF for further coordination.
NMDGF (Environmental Review tool)	A list of special status species, including NMDGF- and USFWS-listed threatened and endangered species and Species of Greatest Conservation Need, was provided	Based on the species list provided from the ERT, the state-endangered Western Toad (<i>Anaxyrus boreas</i>) was considered for addition to the species list in the EA. The Western toad in NM occurs at higher elevations (BISON-M 2020) and suitable habitat is not present in the Farmers Ditch project area.
NMDGF (Environmental Review tool)	The project occurs within important habitats for wildlife, which could include fawning/calving or wintering areas for species such as deer and elk, or high wildlife movement and activity areas. Management recommendations include restrictions on noise-generating activities and taking actions to reduce wildlife-vehicle collisions.	Impacts to wildlife would be temporary and minor as described in the EA. The project area is close to urban development, highways and other human impacts. Noise from construction would only occur during daylight construction hours. Vehicles involved in construction will travel at low speeds due to the nature of the access roads and work area.

NMDGF (Environmental Review tool)	Because riparian areas are important wildlife habitats, the project footprint should avoid removing any riparian vegetation or creating ground disturbance either directly within or affecting the riparian area.	Disturbance will be limited to the ditch right-of-way which includes a few cottonwoods and willows that are disjunct from the San Juan River riparian corridor. The adjacent riparian corridor would not be disturbed.
NMED	New Mexico Environment Department (NMED) generally agrees with recommended Alternative B: Buried Pipe because it is anticipated to result in less regular maintenance, and ditch banks prone to erosion would be stabilized by re-establishment of native vegetation.	concur
NMED	The Ground Water Quality Bureau (GWQB) advises all parties involved in the project to be aware of notification requirements for accidental discharges.	concur
NMED	The Air Quality Bureau (AQB) advises that the project as proposed should have no significant negative impacts on ambient air quality.	concur
NMED	The Solid Waste Bureau (SWB) advises that ditch rehabilitation work has the potential to impact previously unknown areas of buried solid waste. In accordance with the New Mexico Solid Waste Rules, 20.9.2.10.A(15) NMAC, if more than 120 cubic yards of solid waste from any one contiguous area requires excavation, submission of a Waste Excavation Plan (WEP) may be necessary.	concur

3.1.4 Organizations and Individuals:

Miles Juett, Assistant Watermaster, NM Office of the State Engineer reviewed the draft EA and had no questions or comments.

3.2 Requests for Public Hearing:

No requests for public hearing were received.

4.0 Alternatives (33 CFR 320.4(b)(4), 40 CFR 230.10)

4.1 No action:

As a no action alternative, the Corps considered placing the pipeline outside of Waters of the United States (WoUS). However, the project is constrained by the area topography with the

existing ditch running along a narrow space between the river and steep bluffs. In parts of the project area with a wider area between the bluffs and the river, the land adjacent to the ditch easement is private and acquiring easement would involve a lengthy and costly real estate process. Also, much of the adjoining land is riparian and installing pipe there would cause loss of valuable riparian habitat. Therefore, the pipe can only be practicably installed in the existing ditch alignment.

. Under this finding the Corps would not discharge fill material into WoUS. No work would be performed to address the current problems associated with the existing open, earthen irrigation ditch. Rockfalls and a drier climate, due to climate change, will continue to compromise the water delivery through the ditch. Without the ability to discharge fill material into WoUS, the project sponsor would not be able to provide reliable irrigation water to Ditch Association members.

In summary, based on the analysis above, the no-action alternative, which would not involve discharge into waters of the United States, is not practicable.

4.2 Onsite Alternatives.

4.2.1 Proposed Action (Preferred): Install buried pipe in the ditch alignment.

4.2.2 On-Site Alternative 2: Install buried pipe outside the ditch alignment.

4.2.3 On-Site Alternative 3: No action

4.2.4 Offsite Alternatives: Due to topography, property ownership constraints, and water right laws, there are no practicable off-site alternatives. To maintain gradient in the pipeline for water delivery, the project must occur within the present ditch alignment in order to meet the project purpose.

5.0 Environmental Setting, Consequences and Mitigation

The practical alternatives which will be reviewed further include:

The No Action Alternative

The Corps would not discharge fill material into WoUS. No work would be performed to address the current problems associated with the existing open, earthen irrigation ditch. Rockfalls and a drier climate, due to climate change, will continue to compromise the water delivery through the ditch. Without the ability to discharge fill material into WoUS, the applicant would not be able to provide reliable irrigation water to Ditch Association members.

The Proposed Alternative

A two-mile segment of open earthen ditch would be partially replaced with an irrigation pipe. The length of ditch to be replaced with pipe has been reduced during design to the minimum necessary to keep rockfall and debris from impacting the ditch. The two miles are split between a Reach 1 and a Reach 2 (see Figure 1). Irrigation pipe eliminates material eroding into and blocking the ditch, public safety concerns associated with open ditches, and channel blockages from external debris. Pipe provides for more efficient distribution of irrigation water to the users and reduces the current amount of maintenance required to keep the system clear of debris.

To assure the safety of workers while installing new buried irrigation pipe, work will include the removing of loose rock and debris in areas determined to present a safety hazard, as shown on the plans. The slopes adjacent to the acequia channel are extremely steep and due to their geological composition pose a potential rockfall hazard to construction workers working within the channel. Prior to the start of construction within the acequia channel, rock scaling will be performed on these rock slopes to remove unstable or potentially unstable rock. Rock scaling will be performed by trained professionals rappelling from the top of the rock slope and using hand tools to dislodge the rocks from the top down in a controlled manner.

5.1 Physical/Chemical Characteristics.

5.1.1 Substrate:

The project site consists of a seasonally wet, earthen irrigation ditch that runs along a steep bluff. The ditch is situated at the upper limit of the San Juan River floodplain on the north side of the river. The ditch banks are vegetated with a mixture of native and non-native, weedy vegetation. Vegetation is described further in the Environmental Assessment. The ditch itself is assumed to be a WoUS and is adjacent to the riparian area bordering the San Juan River.

Soils in the San Juan River floodplain fall within the Riverwash and Werlog loam soil series. Soils above the floodplain fall in the Fruitland series and the very steep Haplargids-Blackston-Torriorthents complex. These are described in detail in the Environmental Assessment (Section 3.1.2 Physiography, Geology, and Soils).

5.1.2 Current patterns and water circulation:

Currently during the irrigation season (April-September), water flows in the ditch and percolates into the adjacent soils, sustaining a narrow band of willow along part of the ditch.

5.1.3 Suspended particulates/turbidity:

Construction activities would not increase turbidity because construction will occur when the ditch is dry. BMPs will be in place to prevent soil and rock from being displaced into the river.

Best management practices (BMPs) are listed in the FONSI and include:

- Sediment and erosion controls would be in place during the construction period.
- Following construction, the soil would be stabilized and all disturbed areas would be revegetated with appropriate native species.

In the long term, sediment and turbidity loading from the ditch would decrease because water running through a pipe would not be subject to rockslides and soil entering as currently occurs with an open ditch.

5.1.4 Normal water level fluctuations:

The closest surface water resource near the Project Area is the San Juan River, from which the ditch diverts water. Water quality in this reach of the San Juan is described in NMED-SWQB 2010. Designated uses of the San Juan River include public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, primary contact, marginal coldwater aquatic life and warmwater aquatic life (New Mexico Administrative Code §20.6.4.405). The sampling standard states temperature must not exceed 32.2 degrees centigrade (90 degrees F).

The volume of water diverted by the ditch is small compared to flows in the San Juan. Enclosing the ditch in pipe may slightly lower the return water temperature as the pipe will be buried and the irrigation water would no longer be open to sunlight. The opportunity for water to pick up turbidity from the surrounding landscape would be virtually eliminated in the piped section of the ditch. However, much of the ditch would remain open. Therefore, changes to water quality parameters of the San Juan River would be negligible.

5.1.5 Flood hazards & floodplain values:

The site does not currently provide flood control functions due to the location along a steep bluff.

5.1.6 Storm, wave, and erosion buffers:

The ditch is currently adversely affected by erosion of the overlying bluffs and the proposed project would prevent erosion of the bluff from impacting water delivery.

5.1.7 Erosion and accretion patterns:

The rock scaling portion of the project would release rocks that are poised to erode and fall from the bluffs. Otherwise, erosion patterns would not be affected by installing pipe in the ditch. Erosion from the steep bluffs would continue after the project. The material would accumulate at the base of the bluffs and eventually would either be removed when excess material blocks the ditch maintenance road, or would be carried into the river by normal, ongoing erosional processes.

5.1.8 Water quality, including salinity gradients:

Temperature of return flows may slightly decrease because the piped ditch water would not be open to the sun and ambient temperatures. Buried pipe would be somewhat buffered from high temperatures. However, return flows from irrigation are minimal.

Irrigation return flows have higher salinity than the source water. This would not change because of putting the ditch into pipe.

Water quality conditions in the watershed are described in NMED-SWQB 2010. There would be no change in the diversion or use of the irrigation water. Primary effects to the San Juan River are from diversion, which would not change under the proposed action; or irrigation return flows, which are minimal.

5.1.9 Aquifer Recharge:

The site contributes minimally, if at all, to aquifer recharge. The adjacent San Juan River is the driver of shallow groundwater table and aquifer recharge.

5.1.10 Baseflow:

No change due to project. Diversion and return flows would not change.

5.2 Biological Characteristics.

5.2.1 Special aquatic sites (wetlands, mud flats, vegetated shallows, riffle and pool complexes, coral reefs, sanctuaries, and refuges):

No special aquatic sites exist within the project site.

5.2.2 Fish, crustaceans, mollusks, and other aquatic organisms in the food web:

The open ditch provides seasonal habitat for aquatic invertebrates. With the installation of pipe, this segment of the ditch would no longer provide this seasonal habitat.

5.2.3 Wildlife values:

Vegetation bordering the ditch provides habitat of variable quality, comprising a band of willows along parts of the ditch and noxious, invasive vegetation along other parts. Bird species identified along the ditch alignment are listed in the Environmental Assessment. Mammals likely to occur in the project area are listed in the Environmental Assessment, and are likely limited to those that tolerate human disturbance, due to the proximity of the ditch to the City of Farmington. Although the open ditch provides a seasonal water source, after the installation of pipe wildlife will still be able to access the San Juan River and its riparian corridor for water and habitat. Implementation of the buried pipe alternative would result in minor loss of riparian foraging habitat but overall would not result in long term negative impacts to fish or wildlife species.

5.2.4 Threatened and endangered species:

As detailed in the Environmental Assessment, the USACE has determined that the Buried Pipe Alternative may affect but is not likely to adversely affect the Southwestern willow flycatcher and yellow-billed cuckoo due to project timing outside of nesting season and minor indirect impacts to riparian vegetation along the ditch. Informal consultation with the USFWS was completed August 19, 2020.

5.2.5 Biological availability of possible contaminants in dredged or fill material:

It is anticipated that most of the fill used to cover the pipe would be obtained on-site. Any imported fill would be required to be clean. There are no known contaminants in the project area, as discussed in the Environmental Assessment.

5.3 Human Use Characteristics.

5.3.1 Water supply and conservation:

The Farmers Mutual Ditch water right and volume of water diverted would not change due to the proposed action. The outlook on water supply in the region is bleak due to climate change and increasingly arid conditions. The Four Corners region is experiencing a long-term drought. Enclosing the ditch in pipe would help minimize evaporative losses along this section of ditch. The fill of WoUS would therefore provide a minor benefit to water supply by reducing evaporative losses.

5.3.2 Other Resources:

Other relevant resources are addressed in the project Environmental Assessment, including: socioeconomic considerations, environmental justice, aesthetics, noise, safety, land use including agricultural and recreational use. Effects to these resources would be insignificant.

6.0 Summary of indirect and cumulative effects from the proposed permit action

Cumulative effects are analyzed in Section 4 of the Environmental Assessment prepared by the USACE Albuquerque District. The proposed action when combined with past, present, or future activities in the Farmers Mutual Ditch area would not significantly add to or raise local

cumulative adverse environmental impacts to a level of significance.

6.1 Mitigation proposed

All practicable steps have been taken to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States. The proposed project would implement appropriate best management practices and minimization measures. Loss or changes in function caused by the project would be minimal, as described in the Environmental Assessment. Current ditch maintenance may actually be more disruptive of the environment than maintaining the pipe would be. Compensatory mitigation is not required for the unavoidable impacts to jurisdictional aquatic resources because the individual and cumulative adverse environmental effects are minimal.

7.0 Findings

7.1 Compliance with Federal, State, and/or Local Laws

Compliance with laws other than the Clean Water Act, Section 404, is addressed in the project Environmental Assessment, Sections 1.3 (Authority and Federal Requirements), 3.1.4 (Floodplains and Wetlands), 3.2 (Air Quality), 3.4.2 (Fish and Wildlife), 3.4.4 (Special Status Species), and 3.5 (Cultural resources).

8.0 Public Interest Review

The relative extent of the public and private need for the proposed work has been considered: The need for the project is to continue providing reliable irrigation water to the community.

The practicability of using reasonable alternative locations and/or methods to accomplish the objective of the proposed structure or work has been evaluated: Alternative project locations are not practical due to design constraints, access, and safety reasons. The project is constrained by the area topography with the existing ditch running along a narrow space between the river and steep bluffs. The pipe can only be feasibly installed in the existing ditch alignment.

The extent and permanence of the beneficial and/or detrimental effects that the proposed structures or work may have on the public and private uses which the area is suited has been reviewed: The proposed action will provide a long-term beneficial effect to water users and the agricultural community, as well as to the area economy.

9.0 Evaluation of Compliance with 404(b)(1) Guidelines

9.1 Alternatives Test:

Based on the discussion in Sections 4.0 and 5.0, there are no available, practicable alternatives having less adverse impact on the aquatic ecosystem and without other significant adverse environmental consequences that do not involve discharges into “waters of the U.S.” or at other locations within these waters. The project is not in a special aquatic site and is not water dependent. It has been determined that there are no alternatives to the proposed discharge that would be less environmentally damaging (Subpart B, 40 CFR 230.10(a)).

9.2 Special Restrictions.

Will the discharge:

Violate state water quality standards?

No. Only clean fill will be used within the ditch alignment. Construction will occur when there is no flowing water in the ditch. Therefore, the project will not release contaminants that will violate state water quality standards. A CWA 401 Water Quality Certification for this project has been requested from the New Mexico Environmental Department and they are currently reviewing the request. The project will not commence until either a WQC has been issued or waived.

Violate toxic effluent standards under Section 307 of the Clean Water Act?

No. Only clean fill will be used within the ditch alignment. Construction will occur when there is no flowing water in the ditch. Therefore, the project will not release contaminants that will violate state water quality standards.

Jeopardize endangered or threatened species or their critical habitat?

No. Analysis of effects to special status species is documented in the Environmental Assessment Section 3.4.4 and Appendix B. The USACE has determined that the Buried Pipe Alternative may affect but is not likely to adversely affect the Southwestern willow flycatcher and yellow-billed cuckoo due to project timing outside of nesting season and minor indirect impacts to riparian vegetation along the ditch.

Evaluation of the information in Section 5 above indicates that the proposed discharge material meets testing exclusion criteria for the following reason(s):

(X) based on the above information, the material is not a carrier of contaminants.

9.3 Other restrictions:

The discharge would not contribute to significant degradation of “waters of the U.S.” through adverse impacts to any of the following:

- Human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife and/or special aquatic sites
- Life stages of aquatic life and/or wildlife
- Diversity, productivity, and stability of aquatic life and other wildlife
- Wildlife habitat
- Loss of the capacity of wetlands to assimilate nutrients or purify water
- Recreational, aesthetic, and/or economic values.

9.4 Actions to minimize potential adverse impacts:

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices (BMPs) as detailed in the Environmental Assessment will be implemented to minimize impacts.

10.0 Findings

The selected alternative is installation of pipe in the ditch alignment, which is the Least Environmentally Damaging Practicable Alternative.

10.1 Public Interest Determination.

A Department of the Army permit, as prescribed by regulations published in 33 CFR 320 to 330, and 40 CFR 230, is not issued by the U.S Army Corps of Engineers to itself. Rather, the Corps has completed this 404(b)(1) analysis demonstrating that the project complies with the 404(b)(1) Guidelines and is not contrary to the public interest.

10.2 Public Compliance with the 404(b)(1) Guidelines:

The discharge complies with the guidelines, with the inclusion of the appropriate and practicable best management practices (listed in the project Environmental Assessment) to minimize pollution or adverse effects to the affected ecosystem.

Prepared by: _____
Dana Price, Biologist
Environmental Resources Section
Date

Reviewed by: _____
Christina Schroeder
Chief, Regulatory NM/TX Branch
Date

Approved by: _____
Danielle Galloway
Chief, Environmental Resources Section
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