

**US Army Corps of Engineers
Albuquerque District**

DRAFT FINDING OF NO SIGNIFICANT IMPACT

Red River Community Ditch Rehabilitation Project

The proposed rehabilitation work on the Red River Community Ditch would be conducted under the Water Resources Development Act of 1986 (Public Law 99-662; 33 U.S.C. 2201 et. seq.), as amended. The Act authorizes the Acequia Rehabilitation Program for the restoration and rehabilitation of irrigation ditch systems (acequias) in New Mexico. Under Section 1113 of the Act, Congress has found that New Mexico's acequias date from the eighteenth century and, due to their significance in the settlement and development of the western United States, should be restored and preserved for their cultural and historic values to the region. The U.S. Army Corps of Engineers (Corps), Albuquerque, District, in cooperation with the New Mexico State Engineers Office and the Red River Acequia Association, is planning the project.

The project area is located near the community of Raton, in Colfax County, New Mexico. Raton is approximately 108 miles northeast of Las Vegas, New Mexico, and the proposed project is approximately 16 miles southeast of Raton along Interstate 25. The acequia system serves 7 association members/landowners and the 1,800 acres of pasture they irrigate. The present system of conveying irrigation water through natural drainages (i.e. arroyos) by way of earthen, open ditches is inefficient and requires intensive maintenance and restructuring after large rain events.

Two alternatives were considered to address problems of water delivery associated with the Red River Community Ditch. The proposed action alternative would replace the earthen ditch that borders three arroyos with three siphons to effectively deliver water and cross these arroyos. An existing flume would be replaced with a siphon at an arroyo crossing. The No Action alternative would not construct three siphons and the earthen ditch would require intensive maintenance and possibly lead to water delivery failure.

The proposed action would result in minor, temporary, or negligible impacts to vegetation, air quality, noise levels, and aesthetic values. The following elements have been analyzed and the planned action would have no significant effects on: natural resources, water quality, flood plain or riparian areas, wetlands, wildlife, special status species or their habitat, or the socio-economic environment. The proposed action is exempt under Section 404 of the Clean Water Act (CWA). Section 401 Water Quality Certification would not apply; however, watercourses are protected and the project is still subject to the State of New Mexico Standards for Interstate and Intrastate Streams. Best Management Practices would be utilized during project construction to prevent construction site erosion and storm water discharges.

Executive Order 11988 (Floodplain Management) provides Federal guidance for activities within the floodplains of inland and coastal waters. The proposed activities would not adversely affect hydrology, existing flow patterns, or cause increases in the extent or duration of flood events. No additional development of the floodplain is likely to result from this project. Therefore, the proposed action complies with this executive order.

The planned action has been coordinated with Federal, State, and local agencies with jurisdiction over the biological and cultural resources of the project area. Based upon these factors and others discussed in detail in the Environmental Assessment, the planned action would have no significant effect on the human environment. Therefore, an Environmental Impact Statement will not be prepared for the proposed pipeline installation in the Red River Community Ditch.

Date

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DRAFT
FINDING OF NO SIGNIFICANT IMPACT AND
ENVIRONMENTAL ASSESSMENT

RED RIVER COMMUNITY DITCH REHABILITATION PROJECT

Prepared By

U.S. Army Corps of Engineers
Albuquerque District



US Army Corps
of Engineers®
Albuquerque District

AUGUST 2004

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**US ARMY CORPS OF ENGINEERS
ALBUQUERQUE DISTRICT**

DRAFT ENVIRONMENTAL ASSESSMENT

**RED RIVER COMMUNITY DITCH REHABILITATION PROJECT,
COLFAX COUNTY, NEW MEXICO**

1.0 Introduction

1.1 Background

The U.S. Army Corps of Engineers (Corps), Albuquerque District, at the request of the Red River Community Ditch (RRCD) and the New Mexico State Engineers Office, is planning a project that would construct three siphons to cross three different drainages or arroyos. The project area is located along the Canadian River downstream from Raton, Colfax County, New Mexico. The RRCD was built in the 1920's and is a total of 6 miles in length serving 7 water users. The ditch supplies water for approximately 1,800 acres of irrigated pasture for cattle and wildlife (Smith, 2004).

The construction work would be conducted under the Water Resources Development Act of 1986 (Public Law 99-662; 33 U.S.C. 2201 et. Seq.), as amended. The Act authorizes the Acequia Rehabilitation Program for the restoration and rehabilitation of irrigation ditch systems (acequias) in New Mexico. Under Section 1113 of the Act, Congress has found that New Mexico's acequias date from the eighteenth century and, due to their significance in the settlement and development of the western United States, should be restored and preserved for their cultural and historic values to the region. The Secretary of the Army has been authorized and directed to undertake, without regard to economic analysis, such measures as are necessary to protect and restore New Mexico's acequias. The State of New Mexico is the project sponsor and the project will utilize a Natural Resources Conservation Service (NRCS) engineering design. The non-federal financial responsibility of any work carried out under this section of the Act is 25 percent.

1.2 Purpose and Need

The design objectives include the installation of three siphons that cross three small arroyos 1) Dutch Arroyo, 2) Tinaja Creek and 3) Loco Arroyo. Currently, the RRCD skirts around the Dutch and Loco Arroyos that span the outline of the arroyos resulting in a longer ditch that has to be maintained (see Figures 1 and 2). An old flume crosses the Tinaja Creek, where the footings are in danger of being undermined. Complete failure of the flume would leave downstream irrigators without water downstream.

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Figure 1. Dutch Arroyo and Tinaja Creek Siphon Locations – Conveyance Treatment for the Red River Community Ditch, Colfax County, New Mexico

**Figure 2. Loco Arroyo Siphon Location – Conveyance Treatment for the Red River
Community Ditch, Colfax County, New Mexico**

1.3 Regulatory Compliance

This EA was prepared by the Corps, Albuquerque District, in compliance with all applicable federal statutes, regulations, and Executive Orders (EO), including the following:

American Indian Religious Freedom Act of 1978 (42 U.S.C. 1996)
Archaeological Resources Protection Act of 1979 (16 U.S.C. 470)
Clean Air Act of 1972, as amended (42 U.S.C. 7401 *et seq.*)
Clean Water Act of 1972, as amended (33 U.S.C. 1251 *et seq.*)
Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*)
Fish and Wildlife Coordination Act of 1958, as amended (16 U.S.C. 661 *et seq.*)
Floodplain Management (Executive Order 11988)
National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*)
Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500 *et seq.*)
National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 *et seq.*)
Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001 *et seq.*)
Protection and Enhancement of the Cultural Environment (Executive Order 11593)
Protection of Wetlands (Executive Order 11990)
Environmental Justice (Executive Order 12898)

This EA also reflects compliance with all applicable State of New Mexico and local regulations, statutes, policies, and standards for conserving the environment such as water and air quality, endangered plants and animals, and cultural resources.

2.0 Alternatives

Two alternatives were considered to address problems of water delivery associated with the Red River Community Ditch.

2.1 Alternative No. 1: No Action

The No Action alternative would provide for no work or Federal assistance for design or rehabilitation construction beyond this study. Therefore, no Federal funding would be spent to assist the acequia association. The irrigation ditch would continue to lose water due to evaporation and ground infiltration and require continual high maintenance.

2.2 Alternative No. 2, the Recommended Plan

This alternative involves placing three siphons across arroyos. These include the Dutch Arroyo, Tinaja Creek Arroyo and the Loco Arroyo. There is an existing flume that crosses the Tinaja Creek Arroyo, which is in disrepair and in danger of collapsing. The siphon would replace the failing flume at Tinaja Creek Arroyo. The other two siphons would replace large portions of ditch that currently skirt the edges of these arroyos. These siphons would lead to the abandonment of the earthen ditches. The project would be constructed during the fall to minimize impacts to the irrigation season and wildlife.

2.3 Environmental Protection

All federal, State, and local regulations and guidelines would be followed. Rehabilitation would also utilize appropriate Best Management Practices (BMPs). All construction work would be confined to the existing acequia association right-of-way. The proposed pipeline site has been previously disturbed by the original construction and by subsequent maintenance work by the acequia association. All staging, including the stockpiling of construction materials and rock and equipment parking for vehicles and equipment that is not in operation, would be above the 100-year floodplain. All equipment used would be stream cleaned prior to start of the project. Equipment would be inspected daily for leaks and no leaking equipment would be used in or near surface waters. Fuel, oil, hydraulic fluids and other similar substances would be stored above the 100-year floodplain and must have a secondary containment system to prevent spills if the primary storage container leaks. Appropriate erosion control measures would be utilized to prevent surface water drainage and erosion from the construction area and effects to surface water quality. Water dispersal equipment would be used to minimize dust during construction activities.

All waste materials would be disposed properly at pre-approved or commercial disposal areas or landfills. Activities would be limited to the designated or otherwise approved areas and would be shown on the construction drawings for construction areas, staging, access and borrow use. Corps approval of these areas would be required regardless of their ownership or distance to the construction sites to ensure protection of vegetation, water quality, threatened and endangered species, cultural resources and other significant resources.

The contract specifications for construction of this project would require avoiding damage, where practicable, to vegetation. Disturbed areas would be evaluated for reseeding with native, indigenous plants, insofar as contract activities result in noticeable damage to existing plants and vegetative ground cover. The construction contractor would be required to submit an Environmental Protection Plan acknowledging and incorporating these protection measures during construction of the project.

The State of New Mexico, being the local sponsor, would enter into an agreement with the Red River Community Ditch to provide for the Red River Community Ditch operations, maintenance, repair, replacement and rehabilitation of each completed item of work.

3.0 Existing Environment and Foreseeable Effects

3.1 Physical Resources

3.1.1 Climate

The RRCD is located in the Canadian Valley in the north-east quadrant of New Mexico. The average maximum temperature for Raton, New Mexico is 65°F while the average minimum temperature is 32°F. The average annual precipitation is about 16.6 inches of moisture. The majority of the annual precipitation comes from brief but intense afternoon thunderstorms, some of which can be severe. These storms usually occur during the late summer and early fall with

an annual total precipitation of approximately 14 inches. Average total snowfall for Raton is 26.7 inches/year (WRCC, 2004).

3.1.2 Physiography, Geology and Soils

The RRCD is located within the Great Plains Province, Raton Section. This section is characterized by high piedmont plains, of both erosional and constructional origin. Extensive basalt flows protect many of the high level surfaces from erosion. Deep canyons of the Canadian river system are cut below these (Williams, 1986).

The geology of the area is dominated by the Sangre de Cristo Mountains to the west and the Raton Basin to the east. The project area is located in the Raton Basin, where the Great Plains surface has been eroded away as streams were strengthened by uplift and by added precipitation of Pleistocene time. Eagle Tail Mountain is made up of Clayton Basalt (Muehulberger, et al. 1961 and Chronic, 1987).

The preferred alternative and the No Action alternative would have no effects upon existing or potential geologic and soil resources in the project area. The addition of three siphons would provide a benefit by providing improved hydraulic efficiency and water quality and by reducing annual maintenance time.

3.1.3 Water Resources

Section 404 of the Clean Water Act of 1972 (CWA; 33 U.S.C. 1251 et seq.), as amended, provides for the protection of waters of the United States through regulation of the discharge of dredged or fill material. The Corps' Regulatory Program (33 CFR Parts 320-330) requires that a Section 404 determination be conducted for all proposed construction that may affect waters of the United States. Washes and arroyos along the proposed right-of-way and construction area are considered "waters of the United States" as per the terminology and definitions used in CWA. However, the Act provides exemptions for certain discharges associated with the construction and maintenance of irrigation ditches (33 CFR 323.4, Exemption No. 3). Discharges associated with siphons, pumps, headgates, wingwalls, weirs, diversion structures, and other facilities functionally related to irrigation ditches are also included in this exemption. Therefore, a Section 404 permit is not required for the proposed project (Malanchuk, 2004; Appendix A).

Section 401 of the CWA, as amended, requires that an applicant for a Section 404 permit also obtain water quality certification for the proposed action prior to initiating the proposed construction. For projects located in New Mexico, the New Mexico Environment Department administers the water quality certification process for U.S. EPA. Since a Section 404 permit is not required for this project, Section 401 state water quality certification is also not required. However, ephemeral watercourses are protected and the project is still subject to the State of New Mexico Standards for Interstate and Intrastate Streams that include isolated wetlands and ephemeral watercourses.

Section 402 of the CWA, as amended, regulates point source discharges of pollutants into waters of the United States and specifies that stormwater discharges associated with construction activity be conducted under National Pollutant Discharge Elimination System guidance (NPDES). Stormwater discharge associated with "construction activity" includes discharges from construction activities (clearing, grading, and excavation) that result in disturbance to one or more acres of land. Therefore, a NPDES permit is required and would be obtained by the construction contractor.

The New Mexico Water Quality Control Commission has defined water quality standards for maintained in rivers and streams into which unconsumed water in the acequia eventually flows. The standards apply to physical, chemical, microbiological and toxic constituents. Established standards prescribe that, in any single sample, pH should be within the range of 5.5 to 9.0, and temperature cannot exceed 32.2 degrees Celsius (90 degrees Fahrenheit). Fecal coliform should not exceed 1,000/100ml and no sample may exceed 2,000/100ml. At mean monthly flows above 100 cfs, the monthly average concentration for TDS cannot exceed 1,500mg/l, sulfate can not exceed 500 mg/l, and chloride can not exceed 250 mg/l.

Because the open ditch receives sediments from upland erosion, these pollutants would continue to be transported to receiving waters in the return discharge under the no action alternative. Since all construction work will be accomplished during the non-irrigation season when the ditch is dry, there would be no affect on water quality during construction. It is anticipated that placing siphons under three arroyos as proposed in the planned design would reduce sediment transport and other pollutants in the system and thereby positively affect water quality. It is anticipated that surface and subsurface flow patterns would be restored as a result of burying the pipe and reestablishing natural contours.

3.2 Biological Resources

The project area is located in the Plains-Mesa Grassland community type. This is the most extensive grassland in the state where blue grama (*Bouteloua gracilis*) codominates with buffalograss (*Buchloe dactyloides*) in the northeast quadrant of New Mexico(Dick-Peddie, 1993). The project area is dominated by grasses with a few forbs and woody plants interspersed throughout the three siphon locations on the ditch.

Herbaceous and woody vegetation observed during a site visit on June 29 and 30 at the Dutch Arroyo, Tinaja Creek, and Loco Arroyo included kochia (*Kochia scoparia*), Russian thistle (*Salsola tragus*), winterfat (*Krascheninnikovia lanata*), showy milkweed (*Asclepias speciosa*), galleta (*Pleuraphis jamesii*), horsetail (*Equisetum* spp.) and salt grass (*Distichlis spicata*).

Animals observed during the June site visit included: pronghorn (*Antilocapra americana*), Killdeer (*Charadrius vociferous*), Barn Swallow (*Hirundo rustica*), Western Meadowlark (*Sturnella neglecta*), Say's Phoebe (*Sayornis saya*) and American Kestrel (*Falco sparverius*). Frogs were heard near the Loco Arroyo crossing.

3.2.1 Special Status Species

Three agencies who have primary responsibility for the conservation of animal and plant species in New Mexico are the U.S. Fish and Wildlife Service (USFWS), under authority of the Endangered Species Act (ESA) of 1973 (as amended); the New Mexico Department of Game and Fish (NMDGF), under the authority of the Wildlife Conservation Act of 1974; and the New Mexico Energy, Mineral and Natural Resources Department, under authority of the New Mexico Endangered Plant Species Act and Rule NONMFRCD 91-1. Each agency maintains a list of animal and/or plant species that have been classified or are candidates for classification as endangered or threatened based on present status and potential threat to future survival and recruitment. Of these species, those with potential to occur in or near the project are given in Table 1. No federally listed species were observed during the two day site visit.

Table 1. Federally Listed Endangered and Threatened Species for Colfax County, New Mexico (USFWS, 1998)

Common Name	Scientific Name	Listing Status	Probability of Occurrence in the Project Area
Arkansas River shiner	<i>Notropis girardi</i>	T	Not likely to occur; found only in the Canadian River downstream of Ute Dam and Revuelto Creek near Logan, New Mexico.
Bald eagle	<i>Haliaeetus leucocephalus</i>	T	May occur.
Black-footed ferret	<i>Mustela nigripes</i>	E, experimental	Not likely to occur, extirpated from New Mexico.
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>	C	May Occur. Prefers short-grass prairie habitat.
Mexican spotted owl	<i>Strix occidentalis lucida</i>	T	Not likely to occur, there is no mature montane forest in the project area.
Piping plover	<i>Charadrius melodus</i>	E, T	May occur. Prefers sparsely vegetated, river sand bars and islands, and reservoir shorelines and may occur in the eastern part of the state as a rare migrant where it would be considered a transient
Southwestern willow flycatcher	<i>Empidonax trailii extimus</i>	E	Not likely to occur, there are no dense riparian areas in the project area.

^a **Endangered Species Act (ESA)** (as prepared by U.S. Fish and Wildlife Service): Only Endangered and Threatened species are protected by the ESA.

E = Endangered: any species that is in danger of extinction throughout all or a significant portion of its range.

T = Threatened: any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

C = Candidate:

U.S. Army Corps of Engineers personnel conducted a reconnaissance survey of the proposed construction area in July 2004.

The Bald Eagle (*Haliaeetus leucocephalus*) is normally found near major waterways and larger lakes where adequate food supplies may be found. The Bald Eagle is known to occur in Colfax County, primarily during the late fall and winter months. The Bald Eagle utilizes large trees for perching and forages primarily for fish, ducks, and carrion along the river and at local reservoirs. The Bald Eagle may fly over the construction area. There are no large perching areas for Bald Eagles in the project areas. Due to the ease of mobility for the Bald Eagle, no perching

areas and the limited disturbance of the proposed action, there would be no effect to the Bald Eagle.

The Piping Plover (*Charadrius melodus*) is a species that prefers sparsely vegetated, river sand bars and islands, and reservoir shorelines and may occur in the eastern part of the state. Piping Plovers have been to occur at the Maxwell National Wildlife Refuge but are consider a rare migrant (USFWS, 1998 and NMDGF, 2002). The Piping Plover may fly over the construction area during migration; however, the bird is not likely to be found in the immediate vicinity of the project area during the planned fall/winter construction period, and due to the ease of mobility for this bird and the limited disturbance of the proposed action, there would be no effect to the Piping Plover.

The Blacked-tailed prairie dog (*Cynomys ludovicianus*) inhabits shortgrass plains. Formerly they were widespread and abundant east of the Rio Grande and in the grasslands of southwestern New Mexico. Black-tailed prairie dogs are known to occur at the nearby Maxwell National Wildlife Refuge (Findley et al., 1975 and NMDGF, 200. No prairie dogs or abandoned “towns” (colonies) were observed in the project area.

Foreseeable effects of the proposed action and the no action alternative on federally listed species of the proposed construction areas would be minor, of short duration, and temporary in nature, and would result in negligible disturbance. The proposed action would have no effect on Federally listed plant or animal species that may occur in the region.

3.3 Cultural Resources

On June 29 and 30, 2004, a Corps archaeologist conducted an intensive cultural resources inventory of approximately 3.28 hectares (8.13 acres) at three proposed construction and staging areas along the Red River Community Ditch, near the community of Maxwell, Colfax County, New Mexico. The survey was conducted in anticipation of construction activities that will include installation of three acequia siphons on three named arroyos/creeks, the Dutch, Tinaja, and the Loco.

Prior to the June 29 and 30th survey, a search of the New Mexico Historic Preservation Division’s (NMHPD) Archaeological Records Management Section (ARMS) database, and the State Register of Cultural Properties and the National Register of Historic Place was conducted. Although prehistoric peoples utilize the area, the records check revealed neither prehistoric or historic cultural resources within or adjacent to the project areas.

On west side of the Canadian River, outside the project area, is a state of New Mexico Registered Site. The Maxwell Irrigation Project (HPD No. 564), was placed on the State Register of Cultural Properties on January 20, 1978. This irrigation project is not associated with Red River Community Ditch.

In Ackerly’s research (1996), the Red River Community Ditch was not mentioned or documented. The nearest acequia or ditch documented near the Red River Community Ditch is the Vermejo Conservancy District. According to Ackerly (1996:62) “most irrigation systems in parts of the Rio Vermejo lying to the east in Colfax County were constructed in the later

nineteenth century.” The geographic description would include the Red River Community Ditch, but it was not mentioned in the reference or reference tables.

During the survey for the proposed Siphon 2, a flume transecting Tinaja Creek, was recorded. Despite the flume’s unstable structure, it is currently conveying irrigation water. The proposed Siphon 2 will reroute the current earthen ditch 12-15 meters (40-50 feet) west of the existing flume. The inverted siphon will assume control over the irrigated water conveyance from the flume and transfer the water under the creek.

The current landowner, Max Mance, stated the earthen ditches and the flume were constructed in the 1920s, and stated that he does not have any knowledge of who the previous owner or owners were. He also stated the existing flume is unreliable, inefficient, and failure of the flume structure is eminent. Although the proposed construction of Siphon 2 will divert the irrigated water away from the flume, he will not demolish the flume, rather, he will leave it intact as is. The ditch and flume is located on property called the TO Ranch. The archaeologist recorded the flume structure through photography and field notes.

Other than the flume, no other properties were encountered within or adjacent to the proposed construction areas, and no artifacts or cultural manifestations were observed during the surveys of the construction areas.

Based on this information, the Corps is of the opinion that there would be “No Historic Properties Affected” by the proposed undertaking or on the historic and cultural resources of the region. Should previously undiscovered artifacts or cultural features be discovered during construction, work would be stopped in the immediate vicinity of the discovery, a determination of significance made, and if required, a mitigation plan formulated in consultation with the New Mexico State Historic Preservation Officer. Consultation with the New Mexico State Historic Preservation Officer is documented in Appendix B.

3.4 Land Use

Range is the most important land use in Colfax County, utilizing 68 percent of the area (USDA, 1972). There is no ‘Prime Farmland’ in the project area. Land use in the project areas are used for grazing cattle and wildlife habitat.

The foreseeable effects of the proposed action on land-use practices of the construction area would be beneficial. Construction of the proposed project would provide for the continued use of the acequia system and the irrigation of pasture. The no action alternative would continue to require intensive maintenance and reduced water quality.

3.5 Socioeconomic Concerns

The 2000 Census indicated that the population of Colfax County was 14,189 persons (U.S. Census Bureau, 2000). The 1999 median household income was \$30,744 while the personal income per capita was \$11,241. During 1999, approximately 15% of the Colfax County population was below the poverty level. This rural agricultural area generally suffers from high unemployment. Ethnically, approximately 81 percent of Guadalupe County is Caucasian. The

nearby community of Raton is the county seat and the largest town in Colfax County. The proposed action would make water delivery more reliable, potentially increasing or ensuring productivity on this land. The no action alternative may result in the disruption of water delivery.

There are no foreseeable effects of the proposed action on the socioeconomic resources in the construction project area. Any economic benefits of the proposed project would primarily go to contractors and their employees and the project would have little or no economic impact on the local population living in the immediate area. The proposed project would also have little or no effect on local community or economic development within the area.

3.6 Environmental Justice

Executive Order 12898 (Environmental Justice) requires “to the greatest extent practicable and permitted by law, and consistent with the principles set for in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...” All work is in a rural, agricultural area. The construction would not disrupt or displace any residential or commercial structures. The work has been reviewed for compliance with this order and it has been determined that the no action and the planned and future designs and alternatives would not adversely affect the health or environment of minority or low-income populations.

3.7 Air Quality

Under the Clean Air Act of 1972, as amended, the U.S. Environmental Protection Agency monitors ambient air quality standards. The project area is in attainment with National Ambient Air Quality Standards set by the U.S. Environmental Protection Agency. Two out of the six criteria pollutants, carbon monoxide (CO) and particulate matter, are monitored in Colfax County by the State of New Mexico Environment Department Air Quality Bureau because they are identified as problematic pollutants for this area. None of these measured averages exceed the national standards. Increased dust and emissions from earthmoving and construction equipment would potentially contribute to temporary increases in criteria pollutants. Through BMPs, increased dust would be kept to a minimum, so the proposed action would not produce significant impacts to air quality. Under the no action alternative no construction would occur and thus no impact to air quality.

3.8 Aesthetics

The RRCD meanders through pasture land and has a rural aesthetic character. The siphons would be placed under the ground’s surface. Therefore, the proposed project would not affect visual and aesthetic resources. All soil would be re-seeded according to the recommended NRCS seed mixtures with landowners approval. There would be no significant effect on aesthetic quality from either the proposed action or no action alternatives.

3.9 Noise

Current noise levels in the vicinity of the RRCD are typical for rural areas. Earthmoving equipment and trucks generate decibel (dB) levels 15 to 30 units higher (LHH, 2001) than the prescribed Federal Highway Administration recommended levels for residential areas close to highways. Recommended levels of 67 dB are expressed as equivalent sound level and the constant average sound level, which contains the same amount of sound energy as the varying levels of the traffic noise (FHA, 2000). To be considered significant, noise levels must be elevated over the long term. Construction during the acequia rehabilitation would temporarily elevate noise levels, but these levels would not persist. Neither alternative would significantly affect noise levels.

3.10 Cumulative Impacts

There have been several acequia rehabilitation projects that were Federally and State funded through the joint efforts of the Corps, State Engineers Office, and the Natural Resources Conservation Service at other locations. There are no known funded acequia rehabilitation projects in Colfax County that have been completed by the Corps. The current project would not create significant cumulative environmental impacts.

4.0 Conclusions

The no action alternative would provide for no work and for no Federal assistance for design or rehabilitation construction beyond this study. Therefore, no Federal funding would be spent to assist the acequia association who need funding assistance to construct a pipeline and manhole sluice structures. The irrigation ditch would continue to require continual high maintenance after rain events as a result of arroyo erosion. The siphons would eliminate the sedimentation and constant maintenance of the ditch that borders the outline of the arroyos. Therefore, the no action alternative was rejected from further consideration.

The recommended plan, place three siphons across three as described, would provide for decreased maintenance time and increased water quality and flow. The new structure would help preserve the economic, cultural, and historic values of the acequia system and for this historic agricultural community. The recommended plan also provides assistance to the acequia association members by reducing the amount of required operation and maintenance.

The recommended plan is designed to have negligible impact on the natural, biological, social, economic, and cultural resources of the project area. Best Management Practices would be utilized during construction. Specific measures to provide environmental and cultural resource protection during construction would be written into contract plans and specifications at the time of detailed design, and would be reiterated during the pre-construction conference held prior to the start of construction. Measures concerning the environment would provide for control of noise, air and water pollution, erosion, and aesthetic degradation, as well as protection of vegetation and fish and wildlife resources including special status species and their habitat. The planned action would result in only minor or temporary impacts on vegetation, air quality and noise levels when best management practices and the environmental protection

specifications in the construction contract are followed. These control measures are specified in accordance with all Federal, State, and local regulations. Therefore, the proposed construction project would have negligible impacts on the resources of the construction area.

5.0 Consultation and Coordination

This EA was prepared by the U.S. Army Corps of Engineers, Albuquerque District, 4101 Jefferson Plaza NE, Albuquerque, New Mexico, 87109-3435. Ben Alanis, Program Manager, Garyald Benally, Archaeologist, and Patty Phillips, Biologist.

Agencies and concerned entities consulted formally or informally in preparation of this EA include:

Red River Community Ditch
U.S. Fish and Wildlife Service New Mexico Ecological Services State Office
Natural Resources Conservation Service Raton Field Office
New Mexico Department of Energy, Minerals, and Natural Resources
New Mexico Office of the State Engineer
New Mexico State Historic Preservation Bureau
New Mexico Department of Game and Fish
New Mexico Environment Department
New Mexico State Historic Preservation Officer

Information on the proposed project including project background, purpose and need, proposed project description, proposed alternatives, and project area map are contained in this EA. The Draft EA was mailed to all entities in the above list.

6.0 References

- Ackerly, N.W. 1996 A Review of the Historic Significance of and Management Recommendations for Preserving New Mexico's Acequia Systems. Prepared by Dos Rios Consultants. Prepared for New Mexico Office of Cultural Affairs, Historic Preservation Division. Santa Fe, New Mexico.
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APPENDIX A

SECTION 404 OF CLEAN WATER ACT

CESPA-OD-R (1145b)

July 15, 2004

MEMORANDUM FOR CH, Environmental Resources Branch (CESPA-EC-
R/Julie Hall

SUBJECT: Jurisdictional Determination, Red River Community Ditch
Rehabilitation Project, Colfax County, New Mexico

1. This replies to your July 12, 2004, letter requesting a jurisdictional determination for the proposed Red River Community Ditch Rehabilitation Project, Colfax County, New Mexico. We have assigned Action No. 2004 30442 to this activity.

2. We have reviewed the proposed project and other information available to us. Based upon the information received to date and the conversation between Mr. William Oberle of our office and Ms. Patricia Phillips of your staff, we have made the following determination.

3. Dutch Arroyo, Tinaja Creek and Loco Arroyo and any adjacent wetlands are tributaries of the Canadian River, an interstate waterway, and are under the jurisdiction of Section 404 of the Clean Water Act.

4. However, the Clean Water Act and implementing regulations at 33 CFR 323.4(a) describe several exemptions for discharges of dredged or fill materials into waters of the United States. The Red River Community Ditch is used solely for irrigation purposes. Therefore, the Red River Community Ditch Rehabilitation Project is exempt from regulation under exemption No. 3 for construction or maintenance of farm or stock ponds or irrigation ditches and a Department of the Army permit will not be required. A summary of this exemption is enclosed for your information.

7. If you have any questions or desire additional information, please contact Mr. William Oberle at (505) 342-5284.

FOR THE COMMANDER:

1 Encls



Daniel Malanchuk
Chief, Regulatory Branch



US Army Corps
of Engineers
Regulatory Branch
4101 Jefferson Plaza, NE
Albuquerque, NM 87105-3435
Tel. No. 505-342-3283

Irrigation Exemption Summary

FARM OR STOCK POND OR IRRIGATION DITCH CONSTRUCTION OR MAINTENANCE

Pursuant to Section 404 of the Clean Water Act (33 USC 1344) and Federal Regulations (33 CFR 323.4), certain discharges for the construction or maintenance of farm or stock ponds or irrigation ditches have been exempted from requiring a Section 404 permit. Included in the exemption are the construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance (but not the construction) of drainage ditches. Discharges associated with siphons, pumps, headgates, wingwalls, weirs, diversion structures, and such other facilities as are appurtenant and functionally related to irrigation ditches are included in this exemption.

A Section 404 permit is required if either of the following occurs:

- (1) Any discharge of dredged or fill material resulting from the above activities which contains any toxic pollutant listed under Section 307 of the Clean Water Act shall be subject to any applicable toxic effluent standard or prohibition, and shall require a permit.
- (2) Any discharge of dredged or fill material into waters of the United States incidental to the above activities must have a permit if it is part of an activity whose purpose is to convert an area of the waters of the United States into a use to which it was not previously subject, where the flow or circulation of waters of the United States may be impaired or the reach of such waters reduced. Where the proposed discharge will result in significant discernible alterations to flow or circulation, the presumption is that flow or circulation may be impaired by such alteration. For example, a permit will be required for the conversion of a wetland from

livicultural to agricultural use when there is a discharge of dredged or fill material into waters of the United States in conjunction with construction of dikes, drainage ditches, or other works or structures used to affect such conversion. A discharge which elevates the bottom of waters of the United States without converting it to dry land does not thereby reduce the reach of, but may alter the flow or circulation of, waters of the United States.

If the proposed discharge satisfies all of the above restrictions, it is automatically exempted and no further permit action from the Corps of Engineers is required. If any of the restrictions of this irrigation exemption will not be complied with, an individual permit is required and should be requested using ENG Form 4345 (Application for a Department of the Army permit). A nationwide permit authorized by the Clean Water Act may be available for the proposed work. State or local approval of the work may also be required.

For additional information concerning exemptions, nationwide permits, or for a written determination regarding a specific project, please contact the Corps at the following addresses:

In New Mexico:

Albuquerque District Corps of Engineers
ATTN: Regulatory Branch
4101 Jefferson Plaza, NE
Albuquerque, New Mexico 87109-3435
Phone: (505) 342-3283

In southeastern Colorado:

Southern Colorado Regulatory Office
720 North Main Street, Room 300
Pueblo, Colorado 81003-3047
Phone: (719) 543-9459

In southern New Mexico and western Texas

El Paso Regulatory Office
P.O. Box 6096
Ft. Bliss, Texas 79906-0096
Phone: (915) 568-1359

APPENDIX B
CULTURAL RESOURCES REPORT