

RECLAMATION

Managing Water in the West

Santo Domingo Tribe – Endangered Species Habitat Improvement Project- Phase III- Environmental Assessment



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

March 2008

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.

RECLAMATION

Managing Water in the West

Santo Domingo Tribe – Endangered Species Habitat Improvement Project- Phase III- Environmental Assessment

Prepared by:

Santo Domingo Tribe
Tribal Utilities Department
Natural Resources Branch
P.O. Box 70
Santo Domingo Pueblo, New Mexico 87052

U.S. Department of Interior
BUREAU OF RECLAMATION
Albuquerque Area Office
Albuquerque, New Mexico

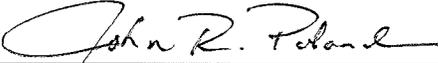
Finding of No Significant Impact

Santo Domingo Tribe – Endangered Species Habitat
Improvement Project- Phase III-
Environmental Assessment



Manager, Environment Division

March 3, 2008
Date



Area Manager, Albuquerque Area Office

3/4/08
Date

AAO-08-001
FONSI Number

BACKGROUND

The installation of impoundments such as the Galisteo Dam in 1970 and Cochiti Dam in 1975, affect the watershed and ecology of the Rio Grande. The regulated hydrograph has led to riverbed incision, creating swift currents, incised river banks, abandoned side channels, isolated backwaters, and thick stands of non-native vegetation. Reduced pulse flows have altered ecological processes, amplified fuel loads, and displaced native vegetation, which further affect habitat for the Rio Grande silvery minnow (silvery minnow) which historically occurred within the Cochiti reach (Bestgen and Platania 1991). Though past surveys of silvery minnow suggest they are capable of persisting in this reach, rejuvenation of in-stream habitats and modifying existing conditions are necessary for establishing habitat conducive to the reproduction and sustainability of silvery minnow populations in this reach.

SUMMARY OF PROPOSED ACTION

The Proposed Action involves habitat construction and thinning of non-native phreatophytes in the Rio Grande bosque, which is anticipated to contribute to the enhancement and recovery of silvery minnow and the Southwestern willow flycatcher in the Cochiti Reach of the Middle Rio Grande. The proposed projects are located in the Rio Grande adjacent to Santo Domingo Tribal Lands; two projects are located on the west side and the third is located on the east side of the Rio Grande. The thinning project is intended to complete a FY 2005 project which will enhance habitat in the bosque.

The Rio Grande projects include the diversification of habitat for the silvery minnow by removing sediment from an abandoned oxbow and enhancing two nonfunctioning Bureau of Reclamation restoration sites from the 1990s.

The proposed projects will affect approximately 48.7 acres in the Rio Grande Bosque, which is currently inundated with non-native phreatophytes and provides marginal wildlife habitat.

The Proposed Action is anticipated to benefit terrestrial and aquatic species and result in positive long term benefits in the Cochiti Reach of the Rio Grande. The Federal Action triggering NEPA compliance is the funding of the Proposed Action by the Middle Rio Grande Endangered Species Act Collaborative Program through Reclamation.

ENVIRONMENTAL IMPACTS RELATED TO THE RESOURCES OF CONCERN

Resources of primary concern associated with the proposed action include the federally threatened and endangered species that could occur within the project area and their habitats, impacts to water quality and erosion into the river, impacts to bosque vegetation, and environmental justice.

Short-term environmental impacts are anticipated during the construction phase of the project, resulting from temporary construction disturbance and noise. Direct environmental impacts may include temporary and localized increases in the level of suspended sediments in the river, and riparian vegetation may be temporarily impacted from clearing and trampling. These short-term direct effects will be minimized by following best management practices, monitoring water quality, using silt curtains to limit sedimentation, conducting construction during low flow periods and outside the nesting season for migratory birds for any potential disturbance.

Indirect effects may result from construction noise above the ambient noise level normally experienced. Indirect long-term beneficial effects to silvery minnow and its habitat will be evaluated and monitored during the course of the project.

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

i. Geology and Soils- The present day channels are composed of clay, silt, sand, and gravel, similar to the composition of ancestral river deposits. The soils on Santo Domingo are of alluvial origins which are deep and well drained. These soils are also very mobile and because of year round water flow sediment transport in the river are constant and no adverse impacts are expected from the Proposed Action.

ii. Hydrology- Under the Proposed Action, no additional water sources will be utilized to allow water to inundate and travel through each of the constructed projects.

iii. Water Resources and Water Balance- The habitat enhancement projects under the proposed action may create more water surface area, potentially increasing evaporation; however, these areas are well shaded which will limit evaporation.

iv. Noxious Weeds- Implementation of the Proposed Action has the potential to result in the introduction and establishment of state listed noxious weeds; however, a revegetation plan combined with thorough cleaning of all equipment before arriving at the sites will minimize that potential. The Natural Resources Branch of the Santo Domingo Tribe will monitor the construction areas for noxious weeds and will treat them for a period of three years after project completion.

v. Threatened and Endangered Species and Species of Special Status- Habitat construction will occur while water levels are low and species surveys will be conducted

prior to and while restoration activities are being conducted under the proposed action. There would be no anticipated effects to federal or state listed threatened or endangered species and no destruction or adverse modification to designated or proposed critical habitat as a result of implementing the Proposed Action.

vi. Cultural Resources and Traditional Cultural Properties- No sacred sites or traditional cultural properties are expected in the project areas; however, should any such sites or properties be identified during construction activities, then Reclamation will consult with the New Mexico State Historic Preservation Office to ensure that no adverse effects result from the Proposed Action.

vii. Indian Trust Assets- The Santo Domingo Tribe is proposing this project. There are no Native American Indian Trust lands or Assets that will be diminished because of the project activities from the Proposed Action.

viii. Socioeconomic Considerations- Positive economic impacts to the Tribal community are anticipated through temporary employment of sawyers and laborers. The Proposed Action will have no adverse impacts to the economy of Sandoval County or the Tribal economy.

ix. Land Use- The Proposed Action will have no effect on the current uses of water for agriculture, ranching, residential, or other activities in the area. The Proposed Action will not affect adjacent agricultural land use and will not change current land status or uses.

x. Environmental Justice- Construction would be undertaken entirely on lands of the Santo Domingo Tribe, a minority population. There are no anticipated environmental effects that would be adverse to tribal members. Employment opportunities for tribal members will have a positive benefit to the Tribe from the projects.

ENVIRONMENTAL COMMITMENTS BY THE SANTO DOMINGO TRIBE

All applicable permits have been obtained prior to implementation of the project, including but not limited to:

- Section 7 of the ESA as administered by the US Fish and Wildlife Service (USFWS). To protect shallow water habitat adjacent to the bank line during construction, a silt curtain will be installed. Standard best management practices will be used to prevent pollution and an unnaturally high level of sediment loading in the river. To protect aquatic habitats from spills or contamination, hydraulic lines will be protected from punctures. Additionally, all fueling will take place outside the active floodplain, and all equipment will undergo cleaning and inspection prior to operation. Equipment will be parked on predetermined locations on high ground away from the project area overnight.
- Avoid impacts to birds protected by the Migratory Bird Treaty Act by scheduling construction outside of the normal bird breeding and nesting season (approximately April 15 through August 15) for most avian species or conducting preconstruction breeding surveys and monitoring if construction were to occur during the breeding and nesting season, and consult with USFWS if affected species are observed.

- Coyote willow will be collected from private fields on Santo Domingo Tribal Lands and planted on the banks of each constructed channel at Sites Six, Seven and Eight (see page 5, section 2.2.2).
- Noxious weeds will be monitored and controlled with an approved broad spectrum herbicide in each site for a period of two years after completion.
- Baseline water quality parameters (temperature, dissolved oxygen, pH and salinity) will be collected by NRB staff before, during and after each site's construction. After construction is complete, water will be monitored monthly in each site.
- Section 106 of the National Historic Preservation Act (NHPA) as administered by the New Mexico State Historical Preservation Office (SHPO). 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 Bureau of Reclamation Albuquerque Area Office 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.

COORDINATION

The USFWS has been notified about the proposed action and their determination of impacts to federal endangered and threatened species potentially occurring in the Project is consistent with the impacts described in Chapter 3 of the EA. The U.S. Army Corps of Engineers (USACE) was consulted regarding Clean Water Act, Section 404 permits. The USACE has determined that permits would not be needed for the proposed action.

CONCLUSION

In accordance with the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. 4331-4335) as amended, and based on the analysis in the EA, the Bureau of Reclamation has determined that implementing the preferred plan presented in the EA for the Santo Domingo Tribe would not result in significant impact on the human environment and does not require preparation of an environmental impact statement.

TABLE OF CONTENTS

List of Figures.....	2
List of Acronyms.....	3
1.0 PURPOSE AND NEED FOR ACTION.....	4
1.1 Introduction.....	4
1.2 Proposed Action.....	4
1.3 Purpose and Need	5
1.4 Relevant Statutes, Regulations, and Other Plans	5
2.0 ALTERNATIVES	6
2.1 Introduction.....	6
2.2 Description of Alternatives.....	6
2.2.1 No Action Alternative.....	6
2.2.2 Proposed Action Alternative.....	6
2.3 Alternatives Considered but Eliminated from Further Study.....	14
3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES.....	14
3.1 Introduction.....	14
3.2 Description of Relevant Affected Resources.....	14
3.2.1 Geology and Soils.....	14
3.2.2 Hydrology.....	15
3.2.3 Water Resources and Water Balance.....	15
3.2.4 Noxious Weeds	15
3.2.5 Threatened and Endangered Species and Species of Special Status.....	15
3.2.6 Cultural Resources and Traditional Cultural Properties.....	16
3.2.7 Indian Trust Assets.....	16
3.2.8 Socioeconomic Considerations.....	17
3.2.9 Land use.....	17
3.2.10 Environmental Justice.....	17
3.2.11 Irretrievable Commitment of Resources of the Proposed Action.....	18
3.2.12 Cumulative Impacts.....	18
4.0 ENVIRONMENTAL COMMITMENTS.....	18
5.0 CONSULTATION AND COORDINATION.....	19
6.0 LIST OF PREPARERS.....	19
7.0 REFERENCES.....	19
8.0 APPENDIX.....	20

8.1.1 Correspondence and coordination.....20

LIST OF FIGURES

1 Project Location Overview.....7
2 Proposed restoration and expansion of Site 68
3 Proposed restoration and enhancement of Site 7.....10
4 Proposed restoration and modification at Site 8.....12
5 Proposed completion of phreatophyte thinning at Site 1.....13



ACRONYMS AND ABBREVIATIONS

AOI	Area of Impact
BA	Biological Assessment
BIA	Bureau of Indian Affairs, U.S. Department of the Interior
BO	Biological Opinion
cfs	Cubic Feet per Second
CFR	Code of Federal Regulations
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act, 16 USC sections 1531-1544
Collaborative Program	Middle Rio Grande Endangered Species Act Collaborative Program
Flycatcher	Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)
FR	Federal Register
ISC	New Mexico Interstate Stream Commission
ITA	Indian Trust Assets
LWD	Large Woody Debris
MRG	Middle Rio Grande
NEPA	National Environmental Policy Act, 42 USC sections 4321-4370d
NHPA	National Historic Preservation Act
NRB	Santo Domingo Tribe-Natural Resources Branch
NRHP	National Register of Historic Places
OSE	Office of the State Engineer, State of New Mexico
Reclamation	Bureau of Reclamation, U.S. Department of the Interior
RPA	Reasonable and Prudent Alternative under the ESA
RPM	Reasonable and Prudent Measures under the ESA (<i>see</i> glossary)
Silvery Minnow	Rio Grande silvery minnow (<i>Hybognathus aramus</i>)
SHPO	New Mexico State Historic Preservation Office
TCP	Traditional Cultural Properties
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

Chapter 1. PURPOSE AND NEED FOR ACTION

1.1 Introduction

In the early 1990's, Reclamation embarked on a series of projects to safeguard the levee in the Santo Domingo reach of the Rio Grande which channelized the river corridor and enhanced water conveyance through Tribal Lands. In effect, the removal of river meanders, back waters and side channels promoted a high velocity river (Hiebert 1990). These activities are thought to have impacted the population of Rio Grande silvery minnow (silvery minnow).

The Santo Domingo Tribe-Natural Resources Branch (NRB) proposes to work at four sites along the Rio Grande. Each project will complement prior year habitat restoration projects in the Cochiti Reach. The NRB will be practicing multiple habitat restoration techniques outlined in the "Habitat Restoration Plan for the Middle Rio Grande," (Tetra Tech 2004). All of the proposed restoration projects are aimed at enhancing riverine features to accommodate the needs of the silvery minnow. One project will be the second phase of a project awarded in 2005. This work involves completing the removal of non-native phreatophytes, while the remaining projects will refurbish low-flow side channels and backwater habitats. Each project will incorporate embayments or scallops and other habitat features associated with desirable silvery minnow nursery habitat. Each project is intended to provide and expand suitable habitat for the silvery minnow.

The Project is funded by the Middle Rio Grande Endangered Species Collaborative Program (Collaborative Program) through the Bureau of Reclamation. This Environmental Assessment (EA) has been conducted to evaluate the impacts of the construction on environmental resources and their relationship to other projects while complying with the National Environmental Policy Act (NEPA) (42 U.S.C. 4331-4335).

1.2 Proposed Action

The proposed federal action is the funding of various habitat restoration projects on Santo Domingo Tribal Lands by the Collaborative Program through Reclamation. These projects involve removal of non-native phreatophytes and habitat construction that are anticipated to contribute to the enhancement and recovery of silvery minnow and the Southwestern willow flycatcher (flycatcher) in the Middle Rio Grande (MRG). Two projects are located on the west side of the Rio Grande and one is located on the east side, while a remaining project is approximately one half mile north of the Rio Grande and the Rio Galisteo confluence.

The proposed Rio Grande projects include diversifying habitat for the silvery minnow by removing sediment from abandoned side channels to enhance and create embayments and backwaters. This project will complement other restoration efforts taking place on Santo Domingo Tribal Lands, including phreatophyte removal in adjacent tributaries and

placement of large woody debris in the Rio Grande to advance sediment deposition in the Cochiti Reach for the enhancement of silvery minnow habitat.

1.3 Purpose and Need

The purpose of the project, funded by Reclamation, is to implement habitat restoration projects to benefit the silvery minnow and the flycatcher, which is an important goal of the Collaborative Program. Implementation of the Proposed Action would not only benefit the silvery minnow and flycatcher, but also, habitat restoration goals identified by the Santo Domingo Tribe would be achieved.

The need for the Proposed Action is to satisfy federal requirements under the Biological Opinion for Reclamation's Water and River Maintenance Operations, the U.S. Army Corps of Engineers' (USACE) Flood Control Operations, and Related Non-Federal Actions on the Middle Rio Grande, New Mexico, 2003 (U.S. Fish and Wildlife Service 2003). The 2003 Biological Opinion requires the funding and collaborative execution of habitat restoration projects on the Middle Rio Grande that will improve survival of all life stages of the endangered silvery minnow, as specified in RPA element S:

In consultation with the [U.S. Fish and Wildlife] Service and appropriate Pueblos and in coordination with parties to the consultation, action agencies shall conduct habitat/ecosystem restoration projects in the Middle Rio Grande to increase backwaters and oxbows, widen the river channel, and/or lower river banks to produce shallow water habitats, overbank flooding, and regeneration stands of willows and cottonwood to benefit the silvery minnow, the flycatcher, or their habitats. Projects should be examined for depletions. It is the Service's understanding that the objective of the action agencies and parties to the consultation is to develop projects that are depletion neutral. By 2013, additional restoration totaling 1,600 acres (648 hectares) will be completed in the action area. In the short term (5 years or less), the emphasis for silvery minnow habitat restoration projects shall be placed on river reaches north of the San Acacia Diversion Dam. Projects should result in the restoration/creation of blocks of habitat 24 hectares (60 acres) or larger [U.S. Fish and Wildlife Service 2003:95–96].

1.4 Relevant Statutes, Regulations, and other Plans

Compliance is required under the provisions of Section 7 of the ESA as administered by the USFWS, and Section 106 of the National Historic Preservation Act (16 U.S.C. 470) as administered by the New Mexico State Historic Preservation Office (SHPO). A site visit and review of the project was performed by the USACE to determine if a permit would be required to conduct these restoration activities under Section 404 of the Clean Water Act (CWA).

Chapter 2. ALTERNATIVES

2.1 Introduction

This chapter describes the two alternatives analyzed in this EA: the No action Alternative and the Proposed Action Alternative. Other alternatives considered are also documented.

2.2 Description of the Alternatives

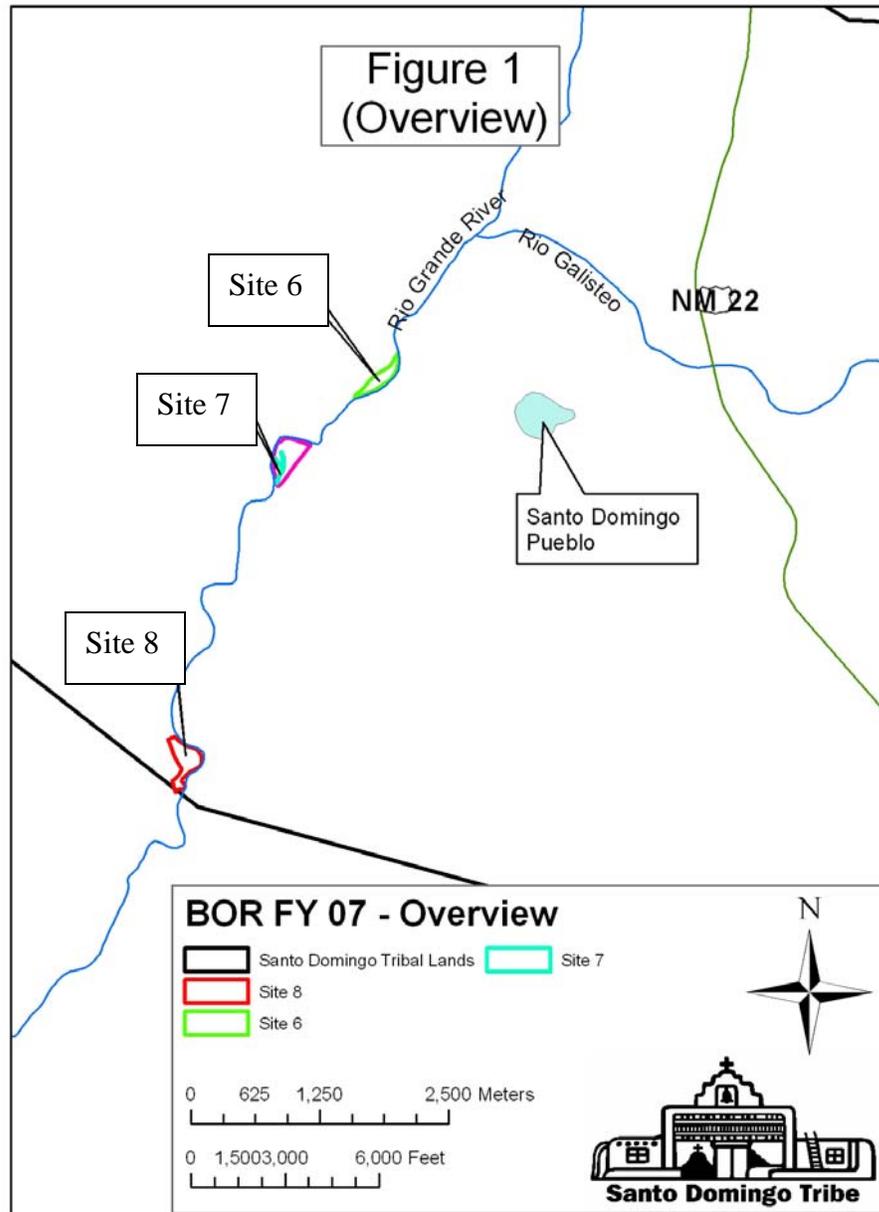
2.2.1 No Action Alternative

Without the proposed action, the Rio Grande in this reach will sustain high water velocities, continue channelizing within the floodplain, and maintain poor habitat quality for the silvery minnow.

Without the diversification of habitat in this reach of the Rio Grande, the high water velocity and limited habitat availability will perpetuate poor quality conditions for flycatcher and silvery minnow.

2.2.2 Proposed Action Alternative

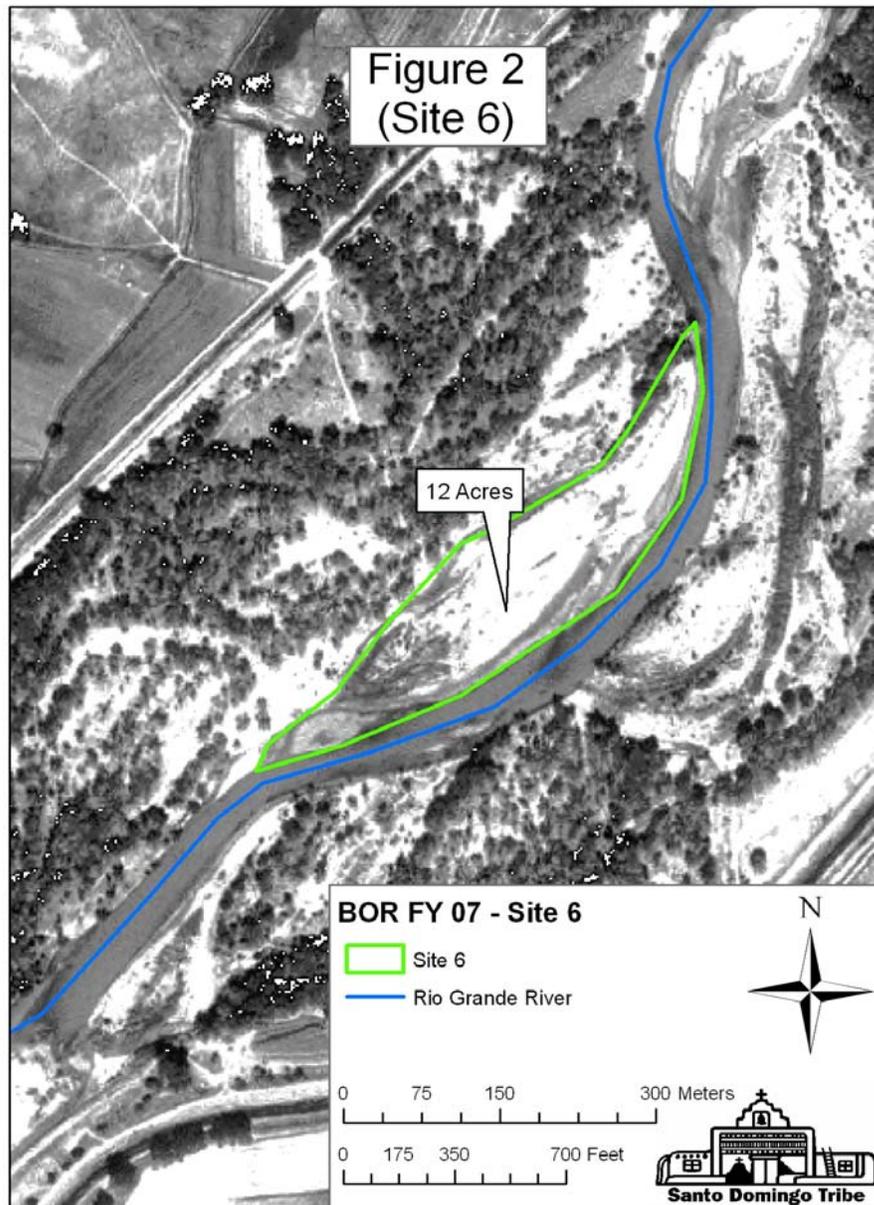
The proposed action is aimed at enhancing riverine features to accommodate the needs of the silvery minnow (Figure 1). Site Six will build upon a previously completed habitat restoration project directly across the river on Santo Domingo Tribal Lands. Sites Seven and Eight are located downstream of Site Six, in which excavation will permit water to flow into previously completed habitat restoration conducted by Reclamation in the early 1990s. These projects are designed to be low-flow velocity side channels, with constructed embayments. Site One is located approximately one mile north of Site Six, and is located on a naturally occurring island in which non-native trees will be thinned to enhance habitat for the flycatcher.



Site Six

Site Six is located on the west side of the Rio Grande, approximately 1.5 miles south of SP88 and Bridge No. M102. The NRB is proposing to reopen an isolated side channel to function as a low velocity, flow-through habitat for silvery minnow (Figure 2). Currently the site encompasses 12 acres and consists of a large sandbar located in the active channel of the Rio Grande and is inundated only at high water flows that are greater than 2,500 cubic feet per second (cfs). The isolated channel of the oxbow is approximately 1780 feet in length. The dominant vegetation in the project area is saltcedar,

intermingled with Russian olive and contains no cottonwood overstory. The soils in the side channel are of mixed composition, ranging from sand/silt to a sand/gravel on the sandbar. The groundwater in the project area is less than two feet below the surface.



The flow-through side channel will be constructed by excavating 12 to 24 inches of river bed materials in the side channel, which will permit conditions for a low-velocity side channel habitat. The inlet (upstream section) and outlet (downstream section) of the channel will remain unexcavated and silt fenced until the excavation of the side channel is completed. The channel will vary from 10 to 20 feet in width with one to three embayment features excavated and tiered into the river's banks to create silvery minnow nursery habitat. Woody debris will be placed in the newly constructed side channel to

enhance habitat variability and persuade invertebrate establishment. Special attention will be observed to engineer the project to accept water at desired flows, likely 800-1200 cfs, as done in the Santo Domingo Tribe's FY 2005 and 2006 restoration projects.

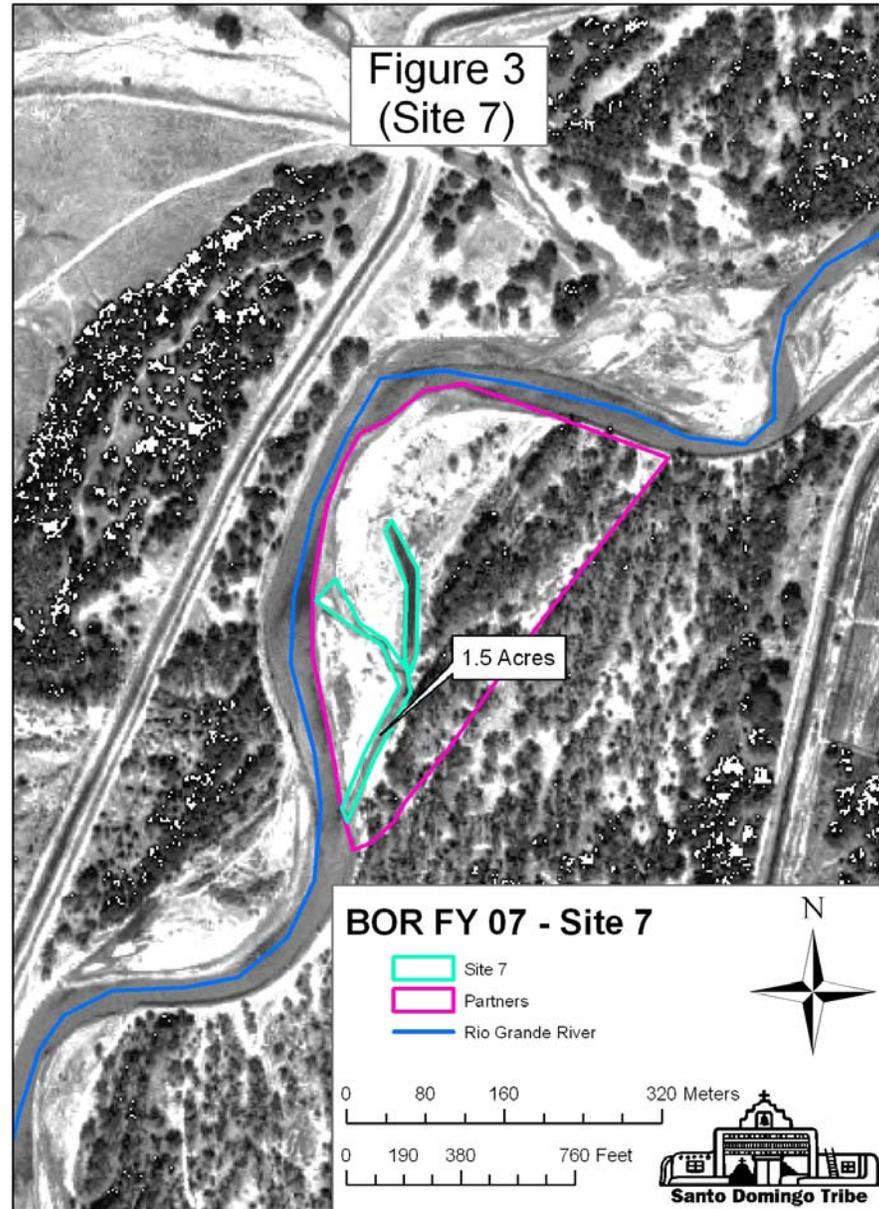
Adjacent to this project area on the sandbar, (within the active channel of the river), a four to five year old stand of saltcedar has emerged. The NRB intends to conduct a prescribed stump-cut treatment which will include the use of the herbicide, Habitat© (Imazapyr, approved for aquatic applications). Removal of the emerging saltcedar would help the proposed constructed habitat survive high flow events without potential scouring effects from water deflected from the saltcedar stand. Though the project area is 12 acres in size, the clearing will total approximately ten acres.

During the construction of the project, precautions include prohibiting heavy equipment from entering the water. Sediment removed from the river will be transported to a community borrow pit or placed next to the project area above the ordinary high water mark. The length and depth of the habitat is intended to promote higher water temperatures, provide shallow and low water velocity habitat, while complementing adjacent habitat restoration projects. Replanted cottonwoods and coyote willows will aid in stabilizing the banks of the constructed habitats without the redirection of the Rio Grande's flow.

Site Seven

In the early 1990s, Reclamation conducted a series of river maintenance activities in the Cochiti Reach aimed at controlling erosion which threatened the levee system. The dredging of the river bed and placement of rip rap increased water conveyance (i.e., water velocity) and channelized the river. Select backwater habitat features were constructed to enhance fisheries habitat, yet most features were destroyed by riverine flows.

In FY 2004, the NRB utilized funds from the USFWS - Partners for Fish and Wildlife Program to restore one of these constructed habitats (Figure 3). The 33 acre restoration site entailed the removal of non-natives, and replanting native grasses, shrubs and trees. In addition to the replanting efforts, the NRB also erected a fence to protect new vegetation from livestock. At this site, a backwater habitat was created by Reclamation. However, since its construction, the river bed has scoured, isolating the backwater and side channel from the active channel. The shallow backwater and side channel contain standing water year-round (mostly due to seepage), and are inundated at water flows greater than 1,500 cfs.



The NRB is proposing to excavate the inlet and outlet of the side channel and backwater to allow water flow into each site. Though the length of the side channel is approximately 980 linear feet and depending upon specific elevations in the side channel, the entire channel will not need excavation because of naturally existing low spots.

Excavation will take place in low flow conditions and is anticipated to last nearly two months. All excavated materials will be either transported to an existing borrow pit or scattered on the site, above the ordinary high water mark. Precautions will be taken during the construction of the project in the event that silvery minnow are located within

the project area, including preventing heavy equipment from entering the water and installing silt fences at the inlet and outlets during excavation.

Replanting efforts will not be necessary because of the naturally occurring dense stand of willow and previously replanted cottonwoods poles. The final product of this project is a functioning backwater and side channel habitats which will provide shallow and low velocity habitat for silvery minnow.

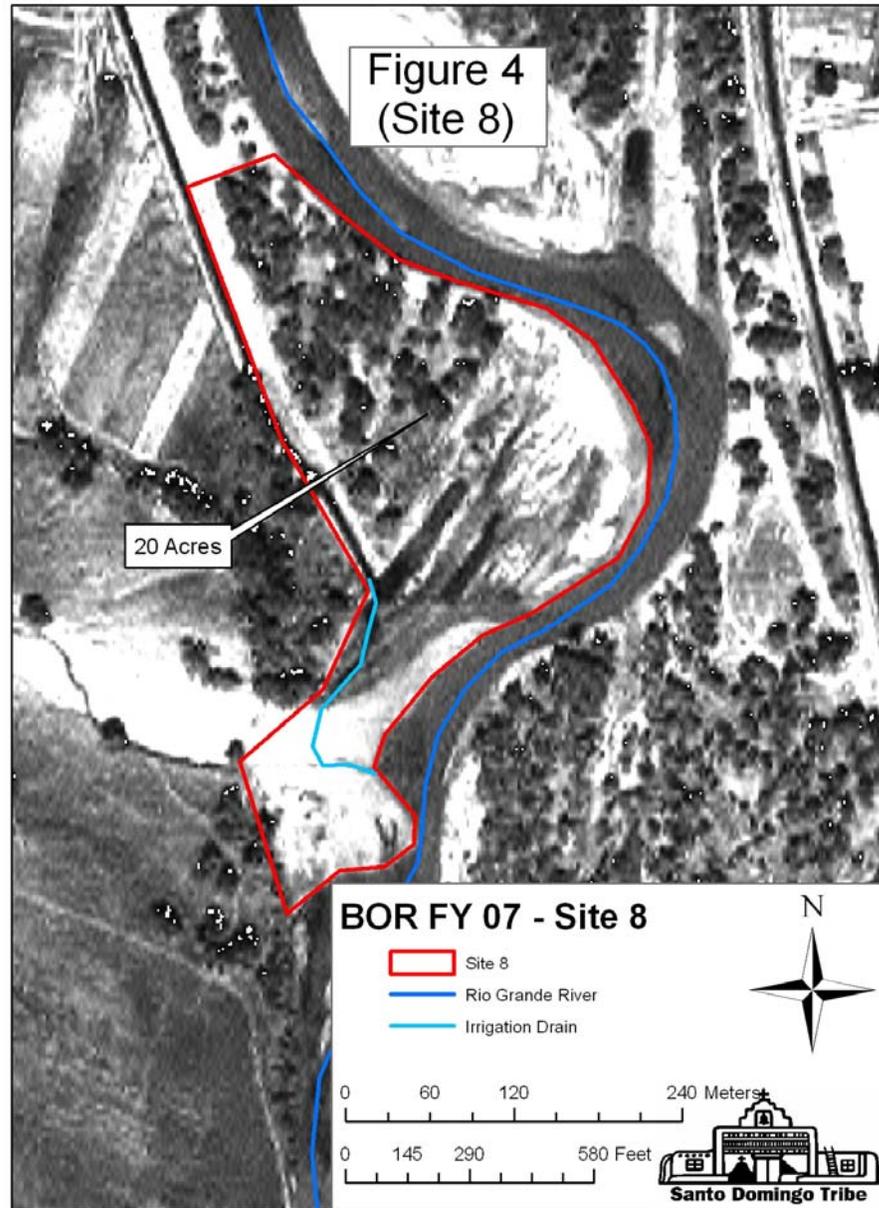
Site Eight

Site Eight is located 3.7 miles south of the SP88 and Bridge No. M102, on the west bank of the Rio Grande at the confluence of Borrego Canyon and the Santo Domingo west side irrigation return (Figure 4). The returning ditch water supports a small network of intermittently flowing channels that meander throughout the alluvial fan of the canyon's confluence. Incision in the active channel has isolated a side channel, created a backwater at the confluence.

This site is composed of a sandbar and a dynamic confluence that intermingles with an upland riparian ecotone. The soil is composed of sand and cobble (originating from upland runoff and erosion events). Downstream of the confluence is a riffle zone of 40 to 60 foot width; this type of habitat is not presently common in this reach of the Rio Grande. Upstream of the riffle zone, the water velocity is slow and maintains a shallow depth. Just across and upstream of this site, the NRB completed a restoration project (December 2007) such that nursery habitat and an abandoned oxbow were reopened to accommodate flowing water.

The NRB is proposing to excavate approximately four to twelve inches of sediment within the confluence in order to reconnect an isolated backwater to create nursery habitat. Excavation will allow water to flow into the backwater and side channel habitat year round and at higher water flows (>1000cfs). The NRB intends to enhance habitat in a tiered manner up the side channel toward the bosque which will provide a variety of habitats to accommodate various life stages of the silvery minnow. In addition to this excavation, the NRB is proposing to replant coyote willow whips throughout the project area. The replanting will extend the life of the restoration project, while providing future habitat for the flycatcher. A total of 5.2 acres are proposed to be excavated and 20 acres of adjacent bosque and sandbar will be thinned of non-natives trees.

Precautions will be taken during the construction of the project in the event that silvery minnow are located within the project area, including preventing heavy equipment from entering the water and installing silt fences when the mouth of the side channel is excavated. To prevent equipment from operating in the river, all excavation activities will occur during low flow conditions.



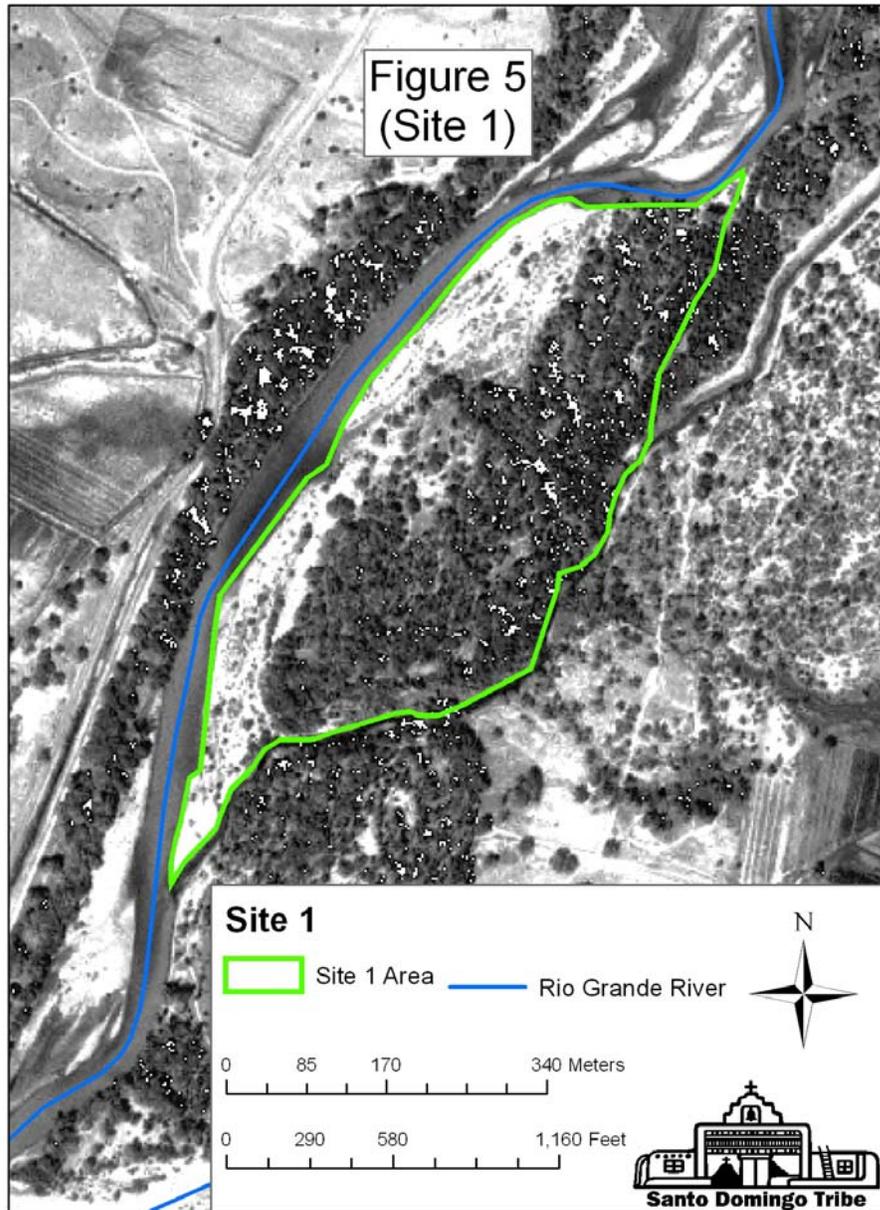
Site 1—Completion of an FY 2005 restoration project

Site One is on the east side of the Rio Grande, approximately 0.5 miles north of the Rio Galisteo confluence (Figure 5). The site consists of a side channel extending approximately 0.75 miles from its upstream beginning to its end. It is fully connected when the active channel of the Rio Grande flows at a volume of approximately 1000 cfs. The site is essentially an island and is approximately 44 acres, in which 30 acres are dominated by mature Russian olive and saltcedar.

In the spring and fall of 2006, the NRB conducted thinning activities at Site One with the intent of opening a densely wooded side channel and adjacent bosque to construct silvery

minnow habitat. It was originally intended for the entire island to be thinned of the invasive vegetation, however, due to the size and density of trees in the project area the thinning was not completed. This permitted tree thinning to only occur near the side channel, which allowed the NRB to construct the three intended embayments. In all, approximately 13 acres of non-natives were removed.

The NRB is proposing to complete the stump-cut prescription on the remaining invasive trees in the site. Thinned trees will be chipped and scattered on site or collected for other purposes.



2.3 Alternatives Considered but Eliminated from Further Study

Alternative Project Areas: Less desirable abandoned oxbows exist on Santo Domingo Tribal Lands; however, greater volumes of sediment would need to be removed to create the habitat conditions of the Proposed Action and therefore the study of these abandoned oxbows was not advanced.

Other sites were considered for restoration but were eliminated from further consideration for a number of reasons, including cost, accessibility and rank in priority. Dense stands of exotic vegetation and several rows of jetty-jacks surround several potential project sites, which would increase costs and time to complete a project.

Chapter 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

This section describes the environmental consequences of various resources, including geology and soils, hydrology, water resources and water balance, noxious weeds, threatened and endangered species and special status species, cultural resources, Indian Trust Assets, socioeconomic considerations, land use, and environmental justice. The description of the affected environment for these resources can be found in the document, Santo Domingo Tribe–Endangered Species Habitat Improvement Project- Phase II-Environmental Assessment April 2007, and is incorporated by reference in this document.

The affected environment is within the Cochiti Reach of the Middle Rio Grande. The Cochiti Reach extends from Cochiti Dam downstream to the Angostura Dam. This reach has been identified by Reclamation and the USFWS, as well as the Collaborative Program, as an area where habitat/ecosystem restoration projects would be highly beneficial to all life stages of the silvery minnow.

3.2 Description of Relevant Affected Resources

3.2.1 Geology and soils

During construction of the backwater and side channels, care will be taken to minimize sediment erosion. Excavated material will be stockpiled at pre-designated locations or transported to a community borrow pit, and silt fencing will be installed when working near the bank of the river. With these mitigating measures, no impacts are anticipated due to the Proposed Action.

Under the No Action Alternative, incision of the river bed has stabilized. in the Cochiti Reach, whereas the erosion of the river banks has been increasing in the Cochiti Reach. of the Middle Rio Grande. Sediment deposition will be minimal; water will run cold. Under the No Action Alternative, geomorphic conditions will continue to be unfavorable for silvery minnow egg retention and larvae development.

3.2.2 Hydrology

Under the Proposed Action, water would flow naturally through the side channels and backwater restoration projects. An increase in desirable habitat conditions suitable for the silvery minnow developmental phases would be available.

Under the No Action alternative, the side channels and backwater areas would continue to be isolated from flows in the Rio Grande and be unavailable for all silvery minnow life stages.

3.2.3 Water Resources and Water Balance

The intent of the Proposed Action is to increase habitat availability for the silvery minnow. The creation of additional surface area may increase evaporation, however we do not anticipate any significant water depletions.

Under the No Action Alternative, there would be no change to surface water and no additional habitat for the silvery minnow. Evapotranspiration losses would increase as non-native vegetation matures and reproduces throughout the Proposed Action areas.

3.2.4 Noxious Weeds

Under the Proposed Action, the removal of saltcedar, Russian olive and Siberian elm will have a positive result by allowing native vegetation to flourish and proliferate.

The No Action Alternative would result in continued growth, expansion and consumption of water by non-native vegetation in and around the project area near the Rio Grande.

3.2.5 Threatened and Endangered Species and Species of Special Status

Two threatened and endangered species: the Rio Grande silvery minnow and the flycatcher; and the Yellow Billed Cuckoo, a USFWS candidate species, historically occurred on Tribal Lands.

Rio Grande Silvery Minnow (*Hybognathus amarus*)

No long-term adverse impacts to silvery minnow or associated habitat are anticipated to occur from short-term construction of new habitat. The anticipated benefits to the silvery

minnow and its habitat resulting from habitat development far outweigh any potential negative impacts.

The No Action Alternation would result in continued poor habitat conditions in the Cochiti Reach.

Southwestern willow flycatcher (*Empidonax trailii extimus*)

Because the project site does not contain actual or potential habitat for the species, the Proposed Action and No Action Alternative would have no effect on breeding habitat and no direct effects to the species.

Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*, *Cuckoo*)

The relatively limited amount of potential Yellow-billed Cuckoo habitat to be removed combined with the mitigation planting ratios that will occur under the Proposed Action may result in minor positive impacts for the cuckoo.

The No Action Alternation would not alter riparian conditions or habitat utilized by this species, and no effects will occur.

3.2.6 Cultural Resources and Traditional Cultural Properties

Cultural Resources include archeological sites, sites eligible for the State Register of Cultural Properties and/or the National Register of Historic Places (NRHP), and properties of traditional religious or cultural importance (Traditional Cultural Properties [TCPs]).

No cultural resources have been identified in the Area of Impact (AOI) of the Proposed Action. In addition, no TCPs or sacred sites were identified in the AOI. The probability of the existence of any artifacts that might have once existed in the floodplain of the Rio Grande is of very low probability (J. Hanson, pers communication). This is due to the nature of the meandering of the Rio Grande and habitat modifications. Therefore, no impacts to cultural resources or TCPs are anticipated due to the Proposed Action or the No Action Alternative.

3.2.7 Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in assets held in trust by the United States government for Indian tribes or for Indian individuals. Some examples of ITAs are lands, minerals, water rights, hunting and fishing rights, titles, and money. ITAs cannot be sold, leased, or alienated without the express approval of the United States government. The United States has a trust responsibility to protect and maintain rights reserved by or granted to Indian tribes or individuals by treaties, statutes, Executive Orders, and rights further interpreted by the courts. This trust responsibility requires that all Federal

agencies take all actions reasonably necessary to protect such trust assets. The Proposed Action would be undertaken on the Santo Domingo Tribal Lands, however, the project has received the full support of the Tribe.

There are no ITAs identified that would potentially be adversely affected due to the Proposed Action or the No Action alternative.

3.2.8 Socioeconomic Considerations

Short-term positive economic impacts to the Santo Domingo community would be observed through temporary employment of sawyers and laborers while construction occurs.

The proposed project and the No Action Alternatives would have no adverse impacts to the economy of Sandoval County or the Santo Domingo Pueblo.

3.2.9 Land Use

The Proposed Action and No Action Alternatives would have no effect on current uses of water for agriculture, ranching, residential, or other activities in the area. The Proposed Action and no Action Alternatives will not affect adjacent agricultural land use and will not change current land status or uses.

3.2.10 Environmental Justice

The planning and decision-making process for actions proposed by Federal agencies involves a study of other relevant environmental statutes and regulations, including EO 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations," which was issued by President Clinton on February 11, 1994 (FR. 1994b). The essential purpose of EO 12898 is to ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

The Proposed Action would be constructed entirely on lands of the Santo Domingo Tribe, a minority population. However, there are no anticipated environmental effects that would be adverse to tribal members. The Proposed Action will provide employment opportunities to tribal members, a positive benefit to the Tribe.

The No Action Alternation would not adversely affect the use of the proposed action site and will have no bearing on the Santo Domingo community.

3.2.11 Irretrievable Commitment of Resources of the Proposed Action

The implementation of the project would result in the commitment of resources such as fossil fuels, construction materials, and labor. In addition, Federal funds will be expended for the construction of the proposed project.

3.2.12 Cumulative Impacts

The Proposed Action would have a net positive benefit to the silvery minnow in the Cochiti reach because of the enhanced habitat availability. Future restoration projects on Santo Domingo will be cumulative, increasing habitat for threatened and endangered species and overall biodiversity on Santo Domingo Tribal Lands.

Restoration efforts from neighboring tribes and pueblos would also benefit from this project because of increased habitat connectivity for the silvery minnow. Reclamation recently classified three priority sites in the Rio Grande corridor of Santo Domingo Tribal Lands in which measures will be taken to protect and restore the river's banks and levees. The anticipated methods to be used by Reclamation are expected to have no adverse impacts to any endangered or threatened species. Cumulative impacts from these projects would benefit the overall recovery efforts of the silvery minnow in the Cochiti reach by increasing the availability and connectivity of habitat in upper reaches of the Middle Rio Grande.

Chapter 4. ENVIRONMENTAL COMMITMENTS BY THE SANTO DOMINGO TRIBE

All applicable permits have been obtained prior to implementation of the project, including but not limited to:

- Section 7 of the ESA as administered by the US Fish and Wildlife Service. To protect shallow water habitat adjacent to the bank line during construction, a silt curtain will be installed. Standard best management practices will be used to prevent pollution an unnaturally high level of sediment loading in the river. To protect aquatic habitats from spills or contamination, hydraulic lines will be protected from punctures. Additionally, all fueling will take place outside the active floodplain, and all equipment will undergo cleaning and inspection prior to operation. Equipment will be parked on predetermined locations on high ground away from the project area overnight.
- Avoid impacts to birds protected by the Migratory Bird Treaty Act (16 U.S.C. 703) by scheduling construction outside of the normal bird breeding and nesting season (April 15 through August 15) for most avian species or conducting preconstruction breeding surveys and monitoring if construction were to occur during the breeding and nesting season, and consult with USFWS if affected species are observed.
- Coyote willow will be collected from Site Six, Seven and Eight and replanted adjacent to each channel (see page 5, section 2.2.2).

- Noxious weeds will be monitored and controlled with an approved broad spectrum herbicide in each site for a period of two years after completion.
- Baseline water quality parameters (temperature, dissolved oxygen, pH and salinity) will be collected by NRB staff before, during and after each site's construction. After construction is complete, water will be monitored monthly in each site.
- Compliance with Section 106 of the National Historic Preservation Act (NHPA). 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 Reclamation Albuquerque Area Office 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.

Chapter 5. CONSULTATION AND COORDINATION

The USFWS has been notified about the proposed action and their determination of impacts to federal endangered and threatened species in the Project areas is consistent with the impacts described in Chapter 3. The USACE was consulted regarding CWA 404 permits and compliance and has determined no permits are needed for the proposed action. (Appendix A).

Chapter 6. LIST OF PREPARERS

Gabriel B. Cosyleon, Santo Domingo Tribe-Natural Resources Manager
Ann A. Watson, Santo Domingo Tribe-Ecologist

Chapter 7. REFERENCES

16 U.S.C. 470 (Short Title). National Historic Preservation Act of 1966, As amended through 2000. An Act to Establish a Program for the Preservation of Additional Historic Properties throughout the Nation, and for Other Purposes. United States Code.

16 U.S.C. 703. Migratory Bird Treaty Act of 1918. As Amended. United States Code.

42 U.S.C. 4331-4335. National Environmental Policy Act (NEPA). 1970. Title 42 - The Public Health and Welfare; Chapter 55 - National Environmental Policy, Subchapter I – Policies and Goals; Sections 4331-4335. U.S. GPO. U.S. Code Online via GPO Access at <http://www.access.gpo.gov/uscode/uscmmain.html>. Accessed 12-16-04.

FR. 1994b. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. Vol. 59, No. 32 / Wednesday, February 16, 1994. pp 7629.

Habitat Restoration Plan for the Middle Rio Grande. 2004. Prepared for: Middle Rio Grande Endangered Species Act Collaborative Program Habitat Restoration Subcommittee. Tetra Tech EM Inc., Albuquerque, New Mexico.

U.S. Fish and Wildlife Service. 2003. Biological and conference opinions on the effects of actions associated with the programmatic biological assessment of the Bureau of Reclamation's Water and River Maintenance Operations, Army Corps of Engineer's Flood Control Operation, and Related Non-Federal Actions on the Middle Rio Grande. Region 2, U.S. Fish and Wildlife Service, Albuquerque, NM.

Chapter 8. APPENDIX

8.1.1 Correspondence and Coordination

**U.S. Army Corps of Engineers- CWA 404 Jurisdictional Determination letter
U.S. Fish and Wildlife Service – Section 7 Consultation for the Proposed Santo Domingo Pueblo Restoration Project Phase III – consultation number 22420-2008-I-0063**



DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
4101 JEFFERSON PLAZA NE
ALBUQUERQUE NM 87109-3435

January 15, 2008

Operations Division
Regulatory Branch

Mr. Gabriel B. Cosyleon
Natural Resources Program
Santo Domingo Tribe
P.O. Box 70
Santo Domingo Pueblo, New Mexico 87052-0070

Dear Mr. Cosyleon:

This replies to your e-mail correspondence regarding the Santo Domingo Pueblo's proposed habitat improvement work at three sites located within sandbars on the Rio Grande at the Santo Domingo Pueblo, Sandoval County, New Mexico. The Albuquerque District, U.S. Army Corps of Engineers (Corps), has assigned Action No. SPA-2008-00028-ABQ to this activity.

The Corps has evaluated the information you provided and studied the project description and the other records and documents available to us. The proposed work will occur on sandbars at three sites (Sites 6, 7, and 8) located within the Rio Grande. At these sites, sediments will be excavated to open up side channels for the benefit of the Rio Grande silvery minnows and other fish species. At all of the sites, excavated material will be transported from the project area or placed immediately outside of the project area above the ordinary high water mark (OHWM).

The Rio Grande within the Santo Domingo Pueblo is a water of the United States and the placement of dredged or fill material below the OHWM of the Rio Grande requires authorization under Section 404 of the Clean Water Act. However, based on an evaluation of the project, the Corps has determined that the project will not involve the placement of any dredged or fill material below the OHWM of the Rio Grande. The proposed project is not regulated under the provisions of Section 404 of the Clean Water Act and a Department of the Army permit will not be required.

Our disclaimer of jurisdiction is only for Section 404 of the Federal Clean Water Act. Other Federal, state and local laws may

apply to the proposed work. Therefore, you may want to also contact other Federal, state and local regulatory authorities to determine whether the proposed work may require other authorizations or permits.

This letter contains an approved jurisdictional determination for your proposed project. If you object to this determination, you may request an administrative appeal under Corps' regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination, you must submit a completed RFA form to the South Pacific Division Office at the following address:

Administrative Appeal Officer
Division Review Office (ph (415)503-6574, fax (415)503-6646)
South Pacific Division, CESP-D-PDS-O
1455 Market Street, Room 1760
San Francisco, CA 94103-1399

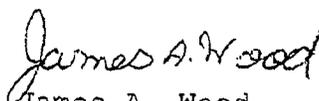
In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by March 15, 2008.

It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

This jurisdictional determination will be valid for 5 years from the date of this letter unless new information warrants revision of the determination within that time.

If you have any questions regarding this determination, please feel free to contact me at (505) 342-3280 or e-mail me at james.a.wood@usace.army.mil. For more information about the regulatory program, please see our web site at www.spa.usace.army.mil/reg.

Sincerely,



James A. Wood
Regulatory Project Manager

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Santo Domingo Pueblo

File Number: SPA-2008-
00028-ABQ

Date: 1/15/08

Attached is:

See Section below

INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)

A

PROFFERED PERMIT (Standard Permit or Letter of permission)

B

PERMIT DENIAL

C

X APPROVED JURISDICTIONAL DETERMINATION

D

PRELIMINARY JURISDICTIONAL DETERMINATION

E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT ENGINEER for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the DISTRICT ENGINEER within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the DISTRICT ENGINEER will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the DISTRICT ENGINEER will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT ENGINEER for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the DIVISION (not district) ENGINEER (address on reverse). This form must be received by the DIVISION ENGINEER within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the DIVISION (not district) ENGINEER. This form must be received by the DIVISION (not district) ENGINEER within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the DIVISION (not district) ENGINEER (address on reverse). This form must be received by the DIVISION ENGINEER within 60 days of the date of this notice. Exception: JD appeals based on new information must be submitted to the DISTRICT ENGINEER within 60 days of the date of this notice.

EXCEPTION: Appeals of Approved Jurisdictional Determinations based on new information must be submitted to the District engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

DISTRICT ENGINEER

Albuquerque District, Corps of Engineers

Attn: CESPA-OD-R, Regulatory Branch

1101 Jefferson Plaza NE

Albuquerque, New Mexico 87109-3435

(505) 342-3283

If you only have questions regarding the appeal process you may also contact:

DIVISION ENGINEER

Army Engineer Division, South Pacific, CESPD-CM-O

Attn: Administrative Appeal Review Officer

1445 Market Street, San Francisco, CA 94103 (415-503-6574)

(Use this address for submittals to the DIVISION ENGINEER)

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:



United States Department of the Interior

FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office
2105 Osuna Road, NE
Albuquerque, New Mexico 87113
Phone: (505) 346-2525; Fax: (505) 346-2542
February 28, 2008

Cons.# 22420-2008-I-0063

Memorandum

To: Area Manager, Bureau of Reclamation, Albuquerque Area Office, Albuquerque, New Mexico

From: Field Supervisor, U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office, Albuquerque, New Mexico

Subject: Concurrence with Determinations for Santo Domingo Pueblo Habitat Restoration Project, Phase III

Thank you for your memorandum dated January 14, 2008, requesting concurrence on determinations made for the proposed habitat restoration phase III project on the Pueblo of San Felipe under section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1534 et seq.). You determined that habitat construction activities "may affect, not likely to adversely affect" Rio Grande silvery minnow (*Hybognathus amarus*) (silvery minnow). Phase III of this project includes a total of 3 sites (site names: *Six*, *Seven*, and *Eight*) and are located on the Pueblo of Santo Domingo, Sandoval County, New Mexico.

The proposed action involves:

Site Six: An abandoned side channel will be reopened to function as a low velocity, flow-through habitat for silvery minnow. The site is 12 acres and the isolated channel of the oxbow is approximately 1780 feet (ft) in length. A flow-through side channel will be constructed by excavating 12-24 inches of river bed materials in the side channel. The inlet and outlet of the channel will remain unexcavated and blocked with a silt fence until the excavation of the side channel is complete. The channel will vary from 10-20 ft in width with 1-3 embayment features excavated and tiered into the river's banks. During construction heavy equipment will be prohibited from entering the water. Sediment recovered will be transported to community borrow pit or placed next to the project area above the ordinary high water mark. Replanted cottonwood and coyote willow will aid in stabilizing the banks of the constructed habitats without unintentionally redirecting flow.

Site Seven: The final product of this project is a functioning backwater and side channel habitats that will provide immediate shallow and low velocity habitat for silvery minnow. An inlet and outlet of a side channel and backwater will be excavated to permit active water flow. The length

of the channel is over 980 ft; however, only part of this will need excavation due to naturally occurring contours in the side channel. All excavated materials will either be transported to an existing borrow pit or placed on site, above the ordinary high water mark. Precautions will be taken during the construction of the project in the event that silvery minnow are located within the project area, including preventing heavy equipment from entering the water and installing silt fences at the inlet and outlets during excavation.

Site Eight: A total of 5.2 acres will be excavated and 20 acres of adjacent bosque and sandbar will be thinned of non-native trees. Four to twelve inches of sediment will be excavated to reconnect an isolated backwater to create nursery habitat. Excavation will allow water to flow into the backwater and side channel habitat year round and at higher water flows (>1000 cfs). Coyote willow will be planted throughout the project area. Precautions will be taken during the construction of the project in the event that silvery minnow are located in the project area, including preventing heavy equipment from entering the water and installing silt fences at the inlet and outlet of the side channel during excavation. All excavation activities will occur during low flow conditions.

You have determined that your proposed habitat restoration project may affect, is not likely to adversely affect the silvery minnow. We concur with your determinations for the following reasons:

Silvery minnow have not been captured in this portion of the river since 1994 (Platania 1995) but may occur at low densities. You report that during surveys both conducted in 2002 and during surveys conducted in the past two years by the Pueblo of Santo Domingo adjacent to the restoration project sites, that no silvery minnow were observed. The probability of encountering silvery minnow in the project area is extremely low. During construction, heavy equipment will not enter the water of the main channel, and silt fences will be used to block off the side channel areas where construction will take place.

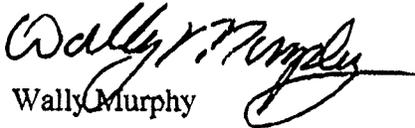
Best management practices (BMPs) will be used to minimize the degree and extent of disturbance to any fish that may be present in the project area. You have committed to the following measures to protect silvery minnow:

- Santo Domingo Natural Resources personnel will deploy a silt curtain at the work area. Fish will be excluded from the work area using a silt curtain to avoid handling and stress.
- Standard BMPs will be used to prevent pollution and an unnaturally high level of sediment loading in the river. BMPs will be enforced to minimize potential impacts to fish from direct construction impacts and erosion inputs into the river during periods of work. All equipment will be inspected prior to mobilization. Spill cleanup equipment will be kept on site for containing accidental fluid leaks.

Please contact the Service to verify the above determinations are still valid if: 1) Future surveys detect listed, proposed or candidate species in habitats where they have not been previously observed; 2) the project is changed or new information reveals effects of the actions to the listed

species or their habitats to an extent not considered in these evaluations; or 3) a new species is listed that may be affected by these projects.

This concludes section 7 consultation on the proposed San Felipe bridge rehabilitation project. Thank you for your concern for endangered species and New Mexico's wildlife habitats. If we can be of further assistance, please contact Michelle Cummer of my staff at the letterhead address, or at 505-761-4715.


Wally Murphy

cc:

Director, New Mexico Department of Game and Fish, Santa Fe, NM

Platania, S.P. 1995. Ichthyofaunal survey of the Rio Grande, Santo Domingo and San Felipe Pueblos, New Mexico, July 1994. Report to the US Army Corps of Engineers, Albuquerque, NM. 56pp.