BLM Consultation

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Taos Field Office
226 Cruz Alta Road
Taos, New Mexico 87571-5983
www.blm.gov/nm

In Reply Refer To:

5102 (F0200)

February 27, 2019

James L Hewitt, Jr, PE
State Conservation Engineer
National Resources Conservation Service
100 Sun Avenue, Suite 602
Albuquerque, NM 87109

RE: Response to Cooperating Agency Invitation for Santa Cruz River Watershed Site 1 Dam Project

Dear Mr. Hewitt:

The Bureau of Land Management (BLM) Taos Field Office appreciates your invitation to participate in the preparation of an environmental assessment for Santa Cruz River Watershed Site 1 Dam project as a cooperating agency under the National Environment Policy Act (NEPA) and associated regulations. The Taos Field Office respectfully declines the invitation. Instead, we would appreciate the opportunity to contribute to the environmental review process in a less formal capacity, and we are confident that we can sufficiently coordinate to provide meaningful input to your analysis at your request.

While the BLM recognizes National Resource Conservation Service as the lead agency in fulfilling the requirements of NEPA for this action, the Taos Field Office is available and willing to assist in this effort. Please contact Mark Lujan, Realty Specialist, at 575-751-4747 or mtlujan@blm.gov if you have any questions or would like to coordinate further on the BLM's involvement in preparing the environmental assessment.

Sincerely,

Brad Higdon
Acting Field Manager

USDA

United States Department of Agriculture

September 11, 2018

Mr. Jeff Tafoya, Field Manager
Bureau of Land Management- Taos Field Office
226 Cruz Alta Road
Taos, New Mexico 87571

Re: Archeological Survey of the Santa Cruz River Watershed Site 1 Dam Location, Rio Arriba County, New Mexico (NMCRIS No. 133762)

Dear Mr. Tafoya:

Enclosed for your review is **one** cultural resource survey report and supporting resource documentation entitled *Archeological Survey of the Santa Cruz Site 1 Dam Location, Rio Arriba County, New Mexico* (NMCRIS No. 133762) by Emily Brown, Aspen CRM Solutions.

In brief, the Natural Resources Conservation Service (NRCS) New Mexico State Office is developing a Supplemental Watershed Plan for the Santa Cruz River Watershed Dam Site 1 to extend the functional life of the structure and to bring it up to current state design standards. The dam and surrounding area occurs on private lands and lands administered by the Bureau of Land Management Taos Field Office. An inventory of the project areas by Aspen CRM Solutions on behalf of the NRCS resulted in the recordation of five newly reported archeological sites (LA 182513-182515, LA 191725, and LA 191726), three newly reported Historic Cultural Property Inventory (HCPI) resources (HCPI 38905-38907), and seventeen (17) isolated occurrences.

The NRCS recommends that resources LA 182513, LA 182515, LA 191725, and HCPI 38906 (La Acequia de la Canada Ancha) be considered eligible for listing on the National Register of Historic Places (NRHP).

Additional research is needed to properly evaluate resource LA 182514 for eligibility to be included on the NRHP. For the purposes of this project, the resource will be treated as eligible for NRHP.

Resources LA 191726, HCPI 38905 (Santa Cruz Site 1 Dam and Spillway), and HCPI 38907 (unnamed Earthen dam) are each recommended to be not eligible for inclusion to the NRHP as these resources do not meet criteria set forth in 36 CFR 60.4. Recordation has exhausted the data potential of these resources.

The noted isolates are each recommended as being not eligible for NRHP as the resources are each discrete in nature and do not have the potential to yield additional information important to the history or prehistory of the area.

To avoid potential adverse effects to archeological sites considered to be eligible for inclusion to the NRHP or having an undetermined NRHP determination (LA 182513, LA 182514, LA 182515, and LA 191725), the NRCS will recommend that these resources and a 20 meter buffer be avoided during all construction and rehabilitation efforts. In the event that any of these resources cannot be avoided by the proposed undertaking, the NRCS will consult with the New Mexico State Historic Preservation Officer (SHPO), interested parties, and your office to determine if the effect will be adverse, following criteria outlined in 36 CFR 800.5.

The preferred alternative for rehabilitation will cause a short segment (~25 meters) of the NRHP eligible La Acequia de la Canada Ancha (HCPI 38907) to be encased in pipeline. Per Appendix B of the Prototype

Programmatic Agreement between the NRCS and SHPO, this effect will be considered to be not adverse as the distance is well less than ten percent of the overall length of the acequia.

No treatment measures will be recommended for the noted isolates and resources considered to be ineligible for NRHP (e.g., LA 191726, HCPI 38905 and HCPI 38907)

If you have any questions, comments, or concerns, regarding the enclosed cultural resource survey report please contact State Cultural Resource Specialist William Volf via phone at (505) 761-4423 or email (william.volf@nm.usda.gov) at your earliest convenience.

Due to time constraints, we respectfully request that any concerns related to the cultural resources survey and report documentation be provided to NRCS within 10 days.

Sincerely,

STEVE KADAS
State Resource Conservationist

Enclosure

cc: (w/enclosure)
William Volf, State Cultural Resource Specialist, NRCS, Albuquerque, NM
Ayana Brown, Assistant State Conservation Engineer, NRCS, Albuquerque, NM

USACE Consultation

Hill, Aimee

From: Allen, Kelly E SPA <Kelly.E.Allen@usace.army.mil>
Sent: Thursday, February 26, 2015 9:13 AM
To: Hill, Aimee
Subject: RE: NRCS Santa Cruz Site 1 Dam Rehabilitation project (UNCLASSIFIED)
Attachments: NWP 43 2012.pdf

Classification: UNCLASSIFIED
Caveats: NONE

Hi Aimee,

Thank you for contacting the USACE about this project and for sending this information.

The dam is definitely located on a waters of the US - Arroyo de la Canada, which is part of the surface tributary system. A delineation of the ordinary high water mark (OHWM), using the arid west OHWM identification manual (available at http://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/Jurisdiction/Arid_West_OHWM_Identification_ERDC_TR%2008-12.pdf) and updated data sheet (available at http://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/Jurisdiction/OHWM%20Arid%20West%20Datasheet.pdf) should be conducted. Also, since there is a potential for the presence of wetlands, a wetland delineation should be conducted using the USACE wetland delineation manual arid west regional supplement (available at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg_supp.aspx).

Based on the information provided, if the preferred alternative requires a 404 permit, there is a slight possibility that work may qualify for nationwide permit 43 for Stormwater Management Facilities, however, the loss of waters of the US cannot exceed 0.5 acres (for definition of "loss of waters..." for the purposes applying this limitation, please see the attached NWP Definitions section) along with other limitations described in the permit attached. If the preferred alternative requires a 404 permit and cannot meet the terms and conditions of this NWP, then it will require an individual permit as I'm not aware of another NWP that could be used.

I would happy to discuss more over the phone with you if you would like. I have a meeting this morning from 10:30-1200 and a doctor's appointment this afternoon from 2pm-3pm, otherwise I'm available today. I will not be available tomorrow, but will be available most of next week.

Thanks again

Kelly E. Allen
505-342-3216 (office)

-----Original Message-----
From: Hill, Aimee [mailto:Hill@mcmjac.com]
Sent: Wednesday, February 25, 2015 3:29 PM
To: Allen, Kelly E SPA
Subject: [EXTERNAL] NRCS Santa Cruz Site 1 Dam Rehabilitation project

Re: Santa Cruz Site 1 Dam Rehabilitation

Rio Arriba County, New Mexico

Hello Ms. Allen:

We are working on an NRCS dam rehabilitation project in your area of the district, and I wonder if you would have time to discuss the project with me. I am in Boise, Idaho so we can discuss via phone or I will be down there in a few weeks for a public and agency scoping meeting (meeting info and notice will be sent to you next week).

General project information:

The Santa Cruz Site 1 Dam is not currently meeting USDA-NRCS and New Mexico Dam Safety regulations, and current engineering standards. The United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS), in cooperation with the Santa Fe-Pojoaque Soil and Water Conservation District, is proposing to rehabilitate the Santa Cruz Site 1 Dam located near Chimayo, in Rio Arriba County, New Mexico.

The National Environmental Policy Act (NEPA) and the Council of Environmental Quality regulations at 40 CFR Parts 1500-1508 require an evaluation of potential environmental impacts associated with federal projects and actions. McMillen Jacobs Associates (formerly McMillen) has been contracted to assist in the environmental analyses for the dam rehabilitation, which will be documented in the form of a Supplemental Watershed Plan and Environmental Assessment (Plan-EA).

This project is being partially funded by the USDA-NRCS Small Watershed Rehabilitation Amendments which authorize funding and technical assistance to rehabilitate aging flood control dams built under the Watershed Protection and Flood Prevention Act [Public Law 83-566 Stat. 666 as amended (16 U.S.C. Section 1001 et. Seq.) 1954; Rehabilitation under Public Law 83-566 as amended by Section 313 of Public Law 106-472]. USDA-NRCS, as the lead federal agency, has initiated NEPA analysis in the form of the Plan-EA to analyze impacts to the natural and human environment from this project. The Plan-EA will include the following elements:

* Alternatives analysis: the evaluation of potential options for the current structure to meet current Utah Dam safety and USDA-NRCS engineering performance criteria, which may include a No Action, a Dam Decommissioning, a Rehabilitation (with options), and a Non-Structural Alternative.

* Detailed analysis of resources that may be affected for each of the alternatives that may satisfy the purpose and need for the project;
* Identification of potential mitigation measures to reduce or eliminate potential impacts; and
* A plan of public participation and government agency coordination throughout development of the Plan-EA.

The Site 1 Dam was constructed in 1962 to capture and retain sediment and water for the purpose of watershed protection and flood prevention. The dam and debris basin are located on BLM-managed lands.

Information provided on the National Wetlands Inventory (NWI) Mapper indicates that a riverine feature and an emergent wetland exist within the project area (see NWI Map attached). The debris basin and upstream and downstream drainages are dry and only convey water during precipitation events, however we will be conducting a waters and wetlands delineation on the site.

Should a version of project rehabilitation be chosen as the agency's preferred alternative, project work components could include grading, raising and/or widening of the existing dam embankment and auxiliary spillway, sediment excavation within the basin, replacement of the toe drain, improvements to the spillway riser and outlet works, as well as improvements at the outlet channel within the project boundaries. Additional ground disturbance related to construction staging and access would also be warranted.

We would like to request input from the USACE Albuquerque District Regulatory Office regarding potential impacts to waters, as well as a preliminary determination on the jurisdiction and permitting of the drainage in the project area. We have included a Vicinity Map, Project Area Map, and the NWI Map with an approximate project boundary. Please note that the actual project area may change as project actions are determined. If you have any questions or concerns regarding the project, please contact me at hill@mcmjac.com or via phone at 208-985-1516.

I look forward to hearing from you.

Sincerely,

Aimee Hill

NEPA Specialist

McMillen Jacobs Associates <http://www.mcmjac.com/>

1401 Shoreline Drive | Boise, Idaho 83702

208.985.1516 p | 208.867.8946 c | hill@mcmjac.com <mailto:hill@mcmjac.com>

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USFWS Consultation

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Mexico Ecological Services Field Office
2105 Osuna Road NE
Albuquerque, New Mexico 87113
Telephone 505-346-2525 Fax 505-346-2542
www.fws.gov/southwest/es/newmexico/

November 9, 2018

Consultation # 02ENNM00-2018-I-0875

Xavier Montoya, State Conservationist
U.S. Department of Agriculture
Natural Resources Conservation Service
100 Sun Avenue NE, Suite 602
Albuquerque, NM 87109

Dear Xavier Montoya:

This letter responds to your Biological Assessment (BA), received September 21, 2018, requesting concurrence for the proposed Santa Cruz Dam Site 1 Project (Project) under section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 et seq.). The Natural Resources Conservation Service (NRCS) has determined that the proposed Project "may affect, not likely to adversely affect" the endangered Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (flycatcher) and the threatened Mexican Spotted Owl (*Strix occidentalis lucida*) (spotted owl). Critical habitat for both species is not present within the action area.

The proposed Project is located in Rio Arriba County near the town of Chimayo, New Mexico and is scheduled to start construction in 2021 and end in 2023. Details associated with the proposed Project are described in detail in the BA. In summary, the Project consists of rehabilitating the Santa Cruz Site 1 Dam to meet current engineering standards and to extend the life of the pre-existing structure. This entails raising the dam crest by 10.6 feet and widening the dam by 24 feet.

The Service concurs with NRCS's determination of "may affect, not likely to adversely affect" for the flycatcher and spotted owl. Our concurrence is based on the rational provided within your BA, and summarized below with our understanding of your project:

- The riparian habitat within the action area lacks the primary constituent elements associated with nesting flycatchers. More specifically, the action area has vegetation that would be too sparse to provide cover/shelter and also lacks perennial water to sustain prey populations;

- During construction, there may be noise disturbance for migrating flycatchers however, the number of individuals that may avoid the area due to noise disturbance cannot be calculated with any amount of certainty;

- Flycatchers are not known to historically occupy habitat within the action area;

- Cliff, scree, and rock vegetation is present within the action area and is a known habitat type used by spotted owls. However, this habitat will not be affected by the proposed action. In addition, this habitat is not likely being utilized by the species because adjacent habitat types are not consistent with the forest structure required that would support adequate prey species;

- Spotted owls are not anticipated to nest in the action area, therefore, noise disturbance impacting spotted owls is not a concern; and,

- The closest known nesting spotted owls would be on Forest Service lands more than 2 miles away. It is expected that noise from the proposed action would attenuate to less than 69 decibels within 165 feet (50 meters) of any nest trees. This is well within the 2012 Recovery Plan recommendations for the species.

NRCS also made "no effect" determinations for several additional species. The Endangered Species Act does not require Federal agencies to consult with the U.S. Fish and Wildlife Service if the action agency determines their Federal action has "no effect" on federally listed species or designated critical habitat. However, we will instead commend the consideration for the species within your BA.

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 this project.

This concludes section 7 consultation on the proposed Project. Thank you for your concern for endangered species and New Mexico's wildlife habitats. If we can be of further assistance, please contact Dave Campbell of my staff at (505) 761-4745.

Sincerely,

Susan S. Millsap
Field Supervisor

cc:
Director, New Mexico Department of Game and Fish, Santa Fe, NM
(michael.sloane@state.nm.us)

Wildlife Biologist, USDA-NRCS, Albuquerque, NM (Santiago.Misquez@nm.usda.gov)

Wildlife Biologist, BLM, Taos, NM (pherrera@blm.gov)

USDA

United States Department of Agriculture

September 21, 2018

Susan Millsap, Field Supervisor
U.S. Fish and Wildlife Service
New Mexico Ecological Services Field Office
2105 Osuna N.E.
Albuquerque, New Mexico 87113

Dear Ms. Millsap:

Please find attached a biological assessment analyzing the effects of the Santa Cruz Dam Site 1 project on threatened and endangered species for your review. The project is in Rio Arriba County near Chimayo, New Mexico. The project may effect, but not likely to adversely affect the Mexican spotted owl and the Southwest willow flycatcher. The Natural Resources Conservation Service believes the effects to be short term and insignificant. The goal of the project is to repair and improve the flood control infrastructure. The purpose of this project is to extend the life of the infrastructure to provide flood prevention, to protect humans and associated infrastructure downstream of the dam.

We request your concurrence on our effect determination assessment on possible protected resources within the project area.

If you have any question about the project or require further information, please contact our State Biologist, Santiago Misquez, at (505) 761-4432 or at santiago.misquez@nm.usda.gov.

Sincerely,

BLAKE GLOVER
Acting State Conservationist

Enclosure

cc:
James Hewitt, State Conservation Engineer, NRCS, Albuquerque, NM
Ayana Brown, Assistant State Conservation Engineer, NRCS, Albuquerque, NM
Jose Varela Lopez, Santa Fe-Pojoaque SWCD, Santa Fe, NM
Mark Lujan, Bureau of Land Management, Taos, NM

September 18, 2018

Biological Assessment
NRCS New Mexico Santa Cruz Site 1 Dam Rehabilitation Project

Reference: Consultation Code: 02ENNM00-2018-SLI-0875
Event Code: 02ENNM00-2018-E-02482
Project Name: Santa Cruz Site 1 Dam

Lead Agency: U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) - New Mexico

Contact Person: Santiago Misquez, NRCS NM State Biologist
phone: (505)761-4432, email: *Santiago.Misquez@nm.usda.gov*

Project Location: Rio Arriba County, New Mexico
USGS Quadrangle: Chimayo, NM. 1998: T21N R10E Section 31
UTM 13S 417274 3985462

INTRODUCTION

The Natural Resources Conservation Service (NRCS) in cooperation with the Santa Fe-Pojoaque Soil and Water Conservation District (SFPSWCD), is working to rehabilitate the Santa Cruz Site 1 Dam located within the Santa Cruz Watershed near Chimayo in Rio Arriba County, New Mexico. McMillen Jacobs Associates has been retained by the NRCS to complete a National Environmental Policy Act (NEPA) Supplemental Watershed Plan and Environmental Assessment (Plan-EA) for a proposed rehabilitation project. This work includes a deliverable to complete a waters of the U.S. and wetland delineation of the action area.

Authority: The original watershed work plan was prepared, and works of improvement have been installed under the authority of the Watershed Protection and Flood Prevention Act of 1954 (Public Law 83-566) as amended. The rehabilitation of the Santa Cruz Site 1 Dam is authorized under Public Law 83-566 (as amended), and as further amended by Section 313 of Public Law 106-472.

This biological assessment serves to document the basis for our effect determinations of the proposed action on federally-listed species or designated critical habitat afforded protection under the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.)* and 50 Code of Federal Regulations [CFR] §402 of the Service's interagency regulations governing section 7 of the Endangered Species Act, as amended. This interagency consultation is authorized by NRCS' NEPA policy under the General Manual 190, Part 410.

The purpose of the project is to provide continued flood protection in the currently protected area downstream of the dam, and to meet current New Mexico Office of the State Engineer, Dam Safety Bureau and NRCS engineering standards. There is a need to meet dam safety and performance standards, to provide continued flood protection to the downstream community, and to decrease the risk of dam failure for approximately 1,038 people, 326 structures, numerous agricultural properties, and multiple roads located within the breach inundation area.

PROJECT CONSULTATION TO DATE

On March 5, 2015, NRCS sent out a general project scoping letter to the USFWS, informing the office of the rehabilitation project and plans for public/agency scoping as well as an outline of the NEPA process. A An agency/stakeholder meeting and a public information meeting a were held, on March 18, 2015, to share information and solicit agency and public comments regarding project area, location, potential proposed construction, and potential for concern to species in the vicinity. The USFWS did not reply or attend the meetings. No further consultation has occurred.

August 21, 2018, NRCS biologist communication with BLM, Taos NM. Provided draft biological evaluation to BLM for their review and comment. The project site lies on lands administered by BLM.

Project Location/Action Area

The Santa Cruz Site 1 dam is located within the Upper Rio Grande Watershed, at the northeast edge of the town of Chimayo, New Mexico (Exhibit A: Location Map). The basin sits along the Arroyo de la Cañada Ancha (intermittent channel) in Section 31 of Township 21 N, Range 10 E, at 36.010071°N latitude, -105.917548°W longitude. The area is identified as an Interior Desert Land Resource Region (LRR D) due to its long dry summer season and annual evapotranspiration exceeding precipitation (USACE 2008a). The dam is located at an elevation of approximately 6,354 feet.

Santa Cruz Site 1 dam consists of an earthen dam and dry basin that attenuates runoff and provides flood control during seasonal runoff and extreme precipitation events. Water is drained through the principal spillway outlet through the dam and does not remain in the basin for more than 10 days following a precipitation event.

The action area encompasses the construction limits that would be utilized during the rehabilitation of the dam and lands in the basin within the planned dam embankment elevation. The dam consists of the following components:

- The basin is located upstream of the dam embankment and has a capacity of approximately 548.7 ac-ft. at the dam crest elevation of 6,354.4 feet. The upstream drainage area feeding into the basin is approximately 8.34 square miles. The basin is normally empty except during seasonal high runoff and extreme weather events.
- The dam embankment is constructed of earth fill and sits at an approximate elevation of 6,354.4 feet. It has a structural height of approximately 67 feet, a crest width of approximately 18 feet and is about 1,082 feet long. The embankment has 3H:1V side slopes upstream and 2H:1V side slopes downstream. The dam embankment has stability berms which have a 4H:1V:1 side slope on the upstream side and a 2. 5H:1V side slope on the downstream side.
- The principal spillway consists of two concrete risers and an outlet conduit which are in series. The upper riser is approximately 11 feet tall with a crest elevation of 6,316.8 feet. This has a 24-inch diameter corrugated metal pipe (CMP) conduit leading to Riser2. Riser 2 is a structure that is approximately 34 feet tall with a crest elevation of 6,339.5 feet. A 30-inch diameter reinforced concrete outlet conduit extends approximately 350 feet from Riser 2 through the dam embankment, and discharges on the downstream side. A plunge pool exists at the discharge point, and a channel extends approximately 85 feet from the plunge pool to the acequia (ditch) downstream
- The existing auxiliary spillway is an earthen spillway that is approximately 600 feet wide with a crest elevation at approximately 6,349.6 feet. It extends down approximately 150+ feet before intersecting with the Cañada de Ojito drainage. The purpose of the auxiliary spillway is to prevent overtopping and relieve additional forces on the dam embankment during high water and flood conditions.

- A retaining dike extends approximately 550 feet north from the north end of the auxiliary spillway. This dike is at an approximate elevation of 6,354.0 feet and helps to confine flood flows in the basin. The dike has 3H:1V side slopes upstream and 2H:1V side slopes downstream.
- Access to the basin is obtained from a dirt access road extending approximately 2,300 feet generally northeast from Road 100 to the top of the dam. The access road crosses the acequia and is not equipped with a stabilized crossing point.

PROPOSED ACTION

The Santa Cruz Debris Basin was designed and built in 1961 by NRCS (formerly SCS) as a high hazard structure. The Plan-EA addresses any identified dam safety deficiencies by evaluating alternatives to rehabilitate the structure to meet current engineering and performance criteria. The changes required, as outlined in the Plan-EA, will serve to provide benefits for continued flood prevention while meeting current applicable federal, state, and local regulations.

Rehabilitation of the Santa Cruz Site 1 Dam would consist of measures to meet current NRCS and New Mexico Dam Safety engineering standards, and to extend the life of the structure for 71 years. Rehabilitation of the debris basin would include the measures listed below.

Dam Embankment
The dam crest would be raised approximately 10.6 feet to elevation 6,365.0 feet. The dam crest would be widened to 24 feet and graded with a cross slope of no more than 3% to direct water back into the basin. The entire dam embankment would be covered with a gravel blanket (1-foot-thick) for erosion protection. The upstream embankment slope would be maintained at 3H:1V and the downstream slope would be maintained at 2H:1V for the upper approximately 36 feet, and 2. 5H:1V for the lower portion.

Auxiliary Spillway
The auxiliary spillway crest would be raised approximately 11.1 feet to elevation 6,360.7 feet. A new reinforced concrete auxiliary spillway would be constructed within the footprint of the existing earthen spillway. The new concrete spillway would have an approximate 40-foot level control section. Riprap would be installed at the downstream toe of the new concrete spillway to provide energy dissipation and erosion protection before entering the adjoining drainage.

Retaining Dike
The existing retaining dike would be reconstructed to meet the requirements for a water impounding structure up to a crest elevation matching the dam crest at 6,365.0 feet. The crest would have a minimum width of 12.5 feet and would be graded with a cross slope of no more than 3% to direct water back into the basin. The entire retaining dike would be covered with a gravel blanket (1-foot-thick) for erosion protection. The upstream embankment would be sloped at 3H:1V and the downstream embankment would be sloped at 2H:1V.

Principal Spillway
The existing principal spillway riser structures would be demolished and replaced with one new principal spillway riser. The crest elevation would be raised approximately 17.8 feet to accommodate capacity for 71 years of sediment accumulation. The new riser would be constructed of reinforced concrete with a steel trash rack, and designed to meet all current state and NRCS engineering standards. The riser would be connected to the existing 30-inch reinforced principal spillway concrete outlet conduit. The outlet conduit would be slip lined to repair any leaks and restore structural stability.

The plunge pool at the principal spillway conduit outlet would be reconstructed with riprap for erosion protection and dissipation before discharging into the downstream channel. To allow connectivity to the

existing downstream channel an approximate 25-foot length of the existing acequia would be piped. The design of the piped section of the acequia would include aesthetically appropriate design features. An armored channel would extend over the piped section of the acequia and discharge into the existing downstream natural drainage channel.

Access Road and Staging

An approximate 8.1-acre staging area would be located upstream of the dam embankment and an approximate 2.4-acre staging area would be located downstream of the dam embankment within the basin. The existing access road to the structure is in poor condition and has a grade that is not traversable by most vehicles. This access road would be removed and restored to a more natural landscape condition. To provide stabilized construction access to the basin, a new access road would be constructed at a grade not to exceed 10% along a new alignment to the top of the dam crest. The new access road would be approximately 14 feet wide and 1,200 feet long. After construction completion the new access road would remain in place and serve as the new permanent access road to the basin.

Rock/Sediment Disposal

Any rock or soil materials excavated during construction activities that are not suitable for reuse would be hauled to an approximately 7.4-acre upland disposal location upstream of the structure and at an elevation above the proposed dam crest elevation (6,365.0 feet). The sediment would be evenly distributed and contoured to mimic the existing landscape. The sediment disposal area would be stabilized and restored upon construction completion. The need for environmental testing of the excavated material is not anticipated because there are no known hazardous waste sites and no naturally occurring or background contaminants in or near the dam or in the upstream drainage area. Likewise, pesticide or herbicides have not been commonly utilized in or near the structure.

Species and Critical Habitat Considered

Information for identifying listed and proposed resources that may be present in the project area was obtained on August 7, 2018 by a NRCS Biologist, using the USFWS Information, Planning, and Conservation System (Exhibit B: IPaC, Consultation Code: 02ENNM00-2018-SLI-0875,). These species and habitat are reviewed for occurrence within the project's action area.

Table 1. IPaC Protected Resources that may possibly occur in or nearby the project action area.

Species Name	Status	Designated Critical Habitat	Critical Habitat in Project Area
Canada Lynx *Lynx canadensis*	Threatened	Yes	No
New Mexico meadow jumping mouse *Zapus hudsonius luteus*	Endangered	Yes	No
Least tern *Sterna antillarum*	Endangered	No	n/a
Mexican Spotted owl *Strix occidentalis lucida*	Threatened	Yes	No
Southwestern Willow flycatcher *Empidonax traillii extimus*	Endangered	Yes	No
Yellow-Billed Cuckoo *Coccyzus americanus*	Threatened	Proposed	No
Jemez Mountains salamander *Plethodon neomexicanus*	Endangered	Yes	No

EFFECTS DETERMINATION

There are listed protected resources that occur in Rio Arriba County, New Mexico which do not have the potential to occur in the action area. The protected resources listed in Table 1 have been considered in this assessment based on literature review of life history, historic and present range, and other relevant data. Project "effect" determinations for each species is provided.

Table 2. Species Effect Determination.

Species/Critical Habitat	Effect Determination	Rationale
Canada lynx, *Lynx canadensis*	No Effect	This project site is not suitable habitat based on species life history requirements. No reasonable potential for occurrence.
New Mexico meadow jumping mouse *Zapus hudsonius luteus*	No Effect	This project site is not suitable habitat based on species life history requirements. No reasonable potential for occurrence.
Least tern *Sterna antillarum*	No Effect	This project site is not suitable habitat based on species life history requirements. No reasonable potential for occurrence.
Mexican Spotted owl *Strix occidentalis lucida*	May affect, is not likely to adversely affect	Suitable habitat is within the proposed action area. The species is not likely to be adversely affected because the associated habitat affects are short term, insignificant, and unavoidable. If owls utilize habitats within or nearby the project site it would only be occasional use.
Southwestern Willow flycatcher *Empidonax traillii extimus*	May affect, is not likely to adversely affect	Suitable habitat is within the proposed action area. The species is not likely to be adversely affected because the associated habitat affects are short term, insignificant, and unavoidable. If flycatchers utilize the riparian habitat it would be it would only be occasional migration use.
Yellow-Billed Cuckoo *Coccyzus americanus*	No Effect	This project site is not suitable habitat based on species life history requirements.
Jemez Mountains salamander *Plethodon neomexicanus*	No Effect	This project site is not suitable habitat based on species life history requirements. No reasonable potential for occurrence.

Habitat within or nearby action area.

There are no perennial surface waters in or near the action area. The upstream drainages and basin are typically dry except during precipitation events or for seasonal runoff. An acequia runs along the downstream side of the dam that conveys water more regularly than the upstream drainage. A narrow riparian corridor exists along the manmade acequia alignment. Another riparian corridor is present downstream of the dam in a low-lying area that appears to be the former alignment of the Arroyo de la Cañada Ancha. Currently all water during precipitation events within the basin drainage area is collected in the basin and either infiltrates into the soil or flows through the principal spillway and outlet channels. Water in the basin does not remain for more than 10 days following a precipitation event.

The action area includes and adjoins a non-contiguous scrub-shrub riparian area approximately 25 acres in size (Exhibit C. Map_ Riparian Habitat). Woody Riparian vegetation along these corridors consist primarily of Russian olive, cottonwoods, Siberian elm, and coyote willows. Herbaceous dominate vegetation includes mixed upland grass species and forbs.

To comply with the Clean Water Act a determination on "Waters of the U.S. and Wetland Delineation" was performed by McMillen Jacobs Associates. Two wetlands were delineated within the Survey Area and determined to be jurisdictional waters of the U.S. (Exhibit D. Map _Wetland Delineation). Based on the assessments performed the action area does contain small patches of riparian habitat. The identified scrub-shrub wetlands are not associated with permanent water. The riparian wetland is supported by seasonal ephemeral flows, seasonal flows through irrigation conveyance, groundwater, and persists as a result of hydrology influenced by the flood control dam.

The flood control basin due to seasonal precipitation events provides early successional habitat suitable to a wide array of wildlife. The predominate grassland community in the basin with adjacent trees (P-J) and shrubs (rabbit brush /four wing salt bush) provide suitable foraging grounds for avian and mammals. The plant community in and nearby the basin provides suitable habitat for insects.

Upstream of the flood control basin cliff, scree, and rock vegetation is present. This habitat type is situated along the Arroyo de la Cañada Ancha and numerous other ephemeral drainages. This canyon land is predominately surrounded by two needle Pinyon and one seed juniper woodland. The habitat associated with the canyon drainages provide connectivity, food, and cover and shelter for many wildlife species.

No effect determinations:

Canada lynx

The proposed project does not lie within the recovery range for Canada lynx (Distinct Population Segment). Lynx population dynamics, survival, and reproduction are closely tied to snowshoe hare availability, making snowshoe hare habitat the primary component of lynx habitat. Lynx and snowshoe hares are strongly associated with moist boreal forests, where winters are long, cold, and snowy (U.S. Fish and Wildlife Service. 2017).

The Canada lynx typically reside in moist boreal forests at high elevations that have cold, snowy winters. The predominant vegetation of boreal forests consists of montane conifer trees with minimal human disturbance. The area surrounding the reservoir and dam does not contain a large un-fragmented tract of montane coniferous forest and is disturbed from recreational human presence. The Canada lynx is not expected to occur in the vicinity of the project since there is no suitable habitat or prey base within the vicinity of the site.

New Mexico meadow jumping mouse

Listed constituent habitat elements (U.S. Fish and Wildlife Service. 2013b) which are not present at the site include: flowing water that provides saturated soils throughout the jumping mouse's active season that supports tall (average stubble height of herbaceous vegetation of at least 61 cm (24 inches)) and dense herbaceous riparian vegetation composed primarily of sedges (*Carex* spp. or *Schoenoplectus pungens*) and forbs. There are not sufficient areas of 9 to 24 km (5.6 to 15 mi) along a stream, ditch, or canal that contain suitable or restorable habitat to support movements of individual New Mexico meadow jumping mice; and the adjacent downstream floodplain no longer extends 100 m (330 ft.) as defined by the bank full height outward to the adjacent uplands. The active floodplain has been reduced (risk or opportunity for active channel dynamics) by the original construction of this flood control dam and other human induced abiotic factors in the watershed. Suitable habitat for the species is not located in or near the project area and it is unlikely that the species would be found within the project area.

Least tern

Interior populations of the Least tern are found near water on riverine sandbars or salt flats that have become exposed during low water. Populations depend almost entirely on cyprinids. Project site hydrology is ephemeral (arroyos) with nearby intermittent (Rio Quemado) and seasonal (irrigation canals) hydrology

which do not provide suitable aquatic habitat for forage prey species. Seasonal water withdrawals from the Rio Quemado for agricultural purposes exasperates the intermittent nature of the local area hydrology to sustain aquatic habitat (dynamic riverine system) requirements for fish and wildlife. Suitable habitat for the species is not located in or near the project area and it is unlikely that the species would be found within the project area.

Yellow-billed cuckoo

Suitable habitat as defined by the U.S. Fish and Wildlife Service (2014) primary constituent elements does not exist because the action area does not contain contiguous or nearly contiguous habitat patches that are greater than 325 feet (100 m) in width and 200 ac (81 ha) or more in extent which would support an adequate prey base. Additionally dynamic riverine processes no longer occur throughout the Santa Cruz watershed due to flood control dams, surface water withdrawals for agriculture, channelization, and transportation infrastructure.

Jemez Mountains salamander

The strictly terrestrial Jemez Mountains salamander predominantly inhabits mixed-conifer forest, consisting primarily of Douglas fir, blue spruce, Engelman spruce, white fir, limber pine, Ponderosa pine, Rocky Mountain maple, and aspen. Although pure stands of Ponderosa pine may not be considered ideal habitat, the species has occasionally been found in this habitat. The species has also occasionally been found in spruce-fir and aspen stands, and high-elevation meadows. However, these habitat types have not been adequately surveyed so the extent to which salamanders use these habitats is not fully known. Predominant understory trees include Rocky Mountain maple, New Mexico locust, ocean spray, and various shrubby oaks. Salamanders are most often encountered under and inside well-rotted Douglas-fir logs or under rocks. Neither critical nor suitable habitat for the species is located in or near the project area and it is unlikely that the species would be found within the project area.

May effect not likely to adversely affect determinations:

Mexican spotted owl

There is no know presence of the owl in or nearby the project area.

The project site falls within the ecological management unit (EMU), Southern Rocky Mountains for the Mexican spotted owl (U.S. Fish and Wildlife Service. 2012). Vegetation within this EMU varies from grasslands at low elevations through pinyon-juniper woodlands, interior shrub lands, ponderosa pine, mixed-conifer and spruce-fir forests, to alpine tundra on the highest peaks (Daubenmire 1943). The Mexican spotted owl is found primarily in canyons in this EMU, the owls also occupy forest habitat types. The canyon habitat often has mature Douglas-fir, white fir, and ponderosa pine in canyon bottoms and on the north- and east-facing slopes. Ponderosa pine grows on the more xeric south and west-facing slopes, with pinyon-juniper growing on the mesa tops (U.S. Fish and Wildlife Service. 2012).

Predominate vegetation cover within a 1 mile assessed area is pinyon-juniper woodlands and dry shrub land & grasslands. Cliff, scree, and rock vegetation is present and is a known habitat type utilized by Mexican spotted owls. These habitat types are described in the recovery plan. A small area of the cliff, scree, and rock habitat is within the project action area, although will not be affected by the action.

It is not likely that the Mexican spotted owl is utilizing the cliff, scree, and rock habitat for nesting due to adjacent habitat types not consistent with forest structure and which to support adequate prey species as described in the listing document (U.S. Fish and Wildlife Service. 2012). Although it may be likely that the owls utilize the canyons (flood control basin habitat as well) as corridors (dispersal) and as foraging grounds as this habitat is within home range.

The proposed action may affect but not likely to adversely the affect Mexican spotted owl or its habitat, because the project will cause temporary loss of early successional habitat with the flood control basin (habitat to support prey base) and create noise which will disturb any owl which may be utilizing the upland associated habitats. Heavy equipment and human presence will discourage owl use of the action area. These effects are short term and indirect. There is no reasonable expectation of any direct effects.

Southwestern willow flycatcher
There is no know presence of the flycatcher in or nearby the project area.

Based on the assessments performed the action area does contain small patches of riparian habitat, although not consistent with listed critical habitat constituent elements. These elements in part define primary nesting and rearing habitat of which is lacking within the project action area. Although it is likely nesting and rearing habitat lies within the watershed. As such the riparian area associated with the project would be utilized by the flycatcher as dispersal and/or migration stop over habitat.

Suitable habitat as defined by the U.S. Fish and Wildlife Service (2013a) primary constituent elements does not exist because the existing riparian habitat is not along a dynamic river or manmade successional environment consisting of areas of dense riparian vegetation of greater than 50% canopy cover, nor is there open water or marsh within the existing riparian corridor. Additionally, it is not likely in the absence of perennial water that sufficient insect prey populations exist.

Cumulative Effects

The action area is influenced by human activities. Operation and maintenance activities occur annually or as needed. These activities include vegetation management. The site is utilized for recreational activities such as off road driving, hiking, and hunting access. The action area is grazed by livestock. Rural residential development has encroached throughout the nearby valley with transportation routes in close proximity. These human activities will likely continue into the future.

Cumulative effects of historic flooding (human life, damage to infrastructure, farmlands) lead to the installation of this flood control infrastructure in 1962. This alternative has no further associated cumulative effects rather extends the function of the flood control dam to resolve inherent human concerns associated with the environment. Project measures intended to protect the downstream community and associated socioeconomic conditions. There are no other known foreseeable projects that have been identified for the action area nor within nearby lands the action area.

CONCLUSION

Based on the short duration, narrow scope, no permanent impacts from proposed project actions, and lack of suitable habitat at the project site, it is the NRCS's opinion that the project, as proposed "may affect, but not likely to adversely affect" the Mexican spotted owl and Southwest willow flycatcher. It is also the NRCS's opinion that the project would have "no effect" to all other species assessed.

There are short term effects of the project on the environment such as loss of early upland successional vegetation within the basin and riparian vegetation along small area near the outlet channel. This vegetation will re-establish through natural succession within a short period of time. Soil erosion is the most significant resource concern within the watershed. Specific project measures will be employed to minimize bare soil exposure. There are no significant adverse effects to fish and wildlife habitat nor extraordinary circumstances which affect protected resources.

Due to uncertainty of the presence or absence of protected resources or the use of habitats within or nearby the project action area, NRCS assumes presence (seasonal or occasional use of habitats) of those

wildlife species which a determination of "may affect" has been made. If warranted NRCS requests reasonable habitat take for the associated habitats. Reasonable conservation measures are expected from the USFWS which do not limit the timing of construction.

NRCS requests concurrence from the USFWS for the effects determinations of this assessment.

Respectfully submitted,

SANTIAGO MISQUEZ Digitally signed by SANTIAGO MISQUEZ
Date: 2018.09.19 14:59:52 -06'00'

Santiago Misquez
NM NRCS State Biologist

ATTACHMENTS
Exhibit A: Location Map.
Exhibit B: Official Protected Species List (IPaC Consultation Code: 02ENNM00-2018-SLI-0875)
Exhibit C: Map_ Riparian Habitat
Exhibit D: Map _Wetland Delineation

LITERATURE CITED

Daubenmire, R. 1943. Vegetation zonation in the Rocky Mountains. Botanical Reviews 9:325-393.

USACE (United States Army Corps of Engineers). 2008a. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). ERDC/EL TR-08-28. Vicksburg, MS: US Army Engineer Research and Development Center.

U.S. Fish and Wildlife Service. 2004. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Mexican Spotted Owl. Federal Register Vol. 69, No. 168. August 31, 2004.

U.S. Fish and Wildlife Service. 2012. Final Recovery Plan for the Mexican Spotted Owl (*Strix occidentalis lucida*), First Revision. U.S. Fish and Wildlife Service. Albuquerque, New Mexico, USA. 413 pp.

U.S. Fish and Wildlife Service. 2013a. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Southwestern Willow Flycatcher; Final Rule. Federal Register Vol. 78. No. 2. January 3, 2013.

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U.S. Fish and Wildlife Service. 2014. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Western Distinct Population Segment of the Yellow-Billed Cuckoo; Proposed Rule. Federal Register. Federal Register Vol.79, No. 158. Friday, August 15, 2014.

New Mexico HPD Consultation

USDA
United States Department of Agriculture

April 22, 2019

Dr. Jeff Pappas
State Historic Preservation Officer
Bataan Memorial Bldg., 2nd Floor
407 Galisteo Street, Suite 236
Santa Fe, New Mexico 87501

Re: Archeological Survey of the Santa Cruz River Watershed Site 1 Dam Location, Rio Arriba County, New Mexico (NMCRIS No. 133762)

Dear Dr. Pappas:

Enclosed for your review is **one** cultural resource survey report and supporting resource documentation entitled *Archeological Survey of the Santa Cruz Site 1 Dam Location, Rio Arriba County, New Mexico* (NMCRIS No. 133762) by Emily Brown, Aspen CRM Solutions.

In brief, the Natural Resources Conservation Service (NRCS) New Mexico State Office is developing a Supplemental Watershed Plan for the Santa Cruz River Watershed Dam Site 1 to extend the functional life of the structure and to bring it up to current state design standards. The dam and surrounding area occur on private lands and lands administered by the Bureau of Land Management Taos Field Office (BLM-Taos). The BLM-Taos has designated the NRCS lead agency status for completing cultural resource compliance with the National Historic Preservation Act.

An inventory of the project area by Aspen CRM Solutions on behalf of the NRCS resulted in the recordation of five newly reported archeological sites (LA 182513-182515, LA 191725, and LA 191726), three newly reported Historic Cultural Property Inventory resources (HCPI 38905-38907), and seventeen (17) isolated occurrences.

The NRCS recommends that resources LA 182513, LA 182515, LA 191725, and HCPI 38906 (La Acequia de la Canada Ancha) be considered eligible for listing on the National Register of Historic Places (NRHP).

Additional research is needed to properly evaluate resource LA 182514 for eligibility to be included on the NRHP. For the purposes of this project, the resource will be treated as eligible for NRHP.

Resources LA 191726, HCPI 38905 (Santa Cruz Site 1 Dam and Spillway), and HCPI 38907 (unnamed Earthen dam) are each recommended to be not eligible for inclusion to the NRHP as these resources do not meet criteria set forth in 36 CFR 60.4. Recordation has exhausted the data potential of these resources.

The noted isolates are each recommended as being not eligible for NRHP as the resources are each discrete in nature and do not have the potential to yield additional information important to the history or prehistory of the area.

To avoid potential adverse effects to archeological sites considered eligible for inclusion to the NRHP or having an undetermined NRHP determination (LA 182513, LA 182514, LA 182515, and LA 191725), the NRCS recommends that these resources (with a 20 meter buffer) be avoided during all construction and rehabilitation efforts.

Natural Resources Conservation Service
100 Sun Avenue N.E., Suite 602, Albuquerque, New Mexico 87109
Voice: (505) 761-4400 Fax: (855) 538-6003

The preferred alternative for rehabilitation of the dam necessitates that a short segment (~25 meters) of the NRHP eligible La Acequia de la Canada Ancha (HCPI 38907) to be encased in pipeline. Per Appendix B of the Prototype Programmatic Agreement between the NRCS and SHPO, this effect is considered to be not adverse as the length impacted by the project is less than ten percent of the overall length of the acequia.

No treatment measures will be recommended for the noted isolates and resources considered to be ineligible for NRHP (e.g., LA 191726, HCPI 38905 and HCPI 38907)

The NRCS considers implementation of the preferred alternative action for the Santa Cruz Watershed Dam 1, following recommendations described above, to result in no adverse effect to historic properties.

If you have any questions, comments, or concerns, regarding the enclosed cultural resource survey report please contact State Cultural Resource Specialist William Volf via phone at (505) 761-4423 or email (william.volf@nm.usda.gov) at your earliest convenience.

Sincerely,

FOR
J. XAVIER MONTOYA
State Conservationist

Concur,

S. Whitefield 4/29/2019
for DR. JEFF PAPPAS
State Historic Preservation Officer

Enclosure

cc: (w/enclosure)
William Volf, State Cultural Resource Specialist, NRCS, Albuquerque, NM
Ayana Brown, Assistant State Conservation Engineer, NRCS, Albuquerque, NM

- Please coordinate Section 106 w/ BLM Taos (stated that Dam is on BLM land).
- SHPO evaluation of LA 182513 is undetermined rather than eligible.

Tribal Consultation

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

TO: Santa Cruz River Watershed Dam #1 **DATE:** 05/18/20
Watershed Plan – Environmental Assessment, Appendix A

SUBJECT: Note to File, Tribal Consulatations **FILE CODE:** 390-12-05

Letters of consultation were sent (via certified postal mail) to all of the offices/addresses, listed below. There were a total of 20 letters mailed to tribes for consultation due to their New Mexico land ownership or ancestral ties to New Mexico.

The Honorable Perry Martinez
Governor
Pueblo of San Ildefonso
02 Tunyo Po
Santa Fe, New Mexico 87506

The Honorable Richard Aspenwind
Governor
Pueblo of Taos
P.O. Box 1846
Taos, New Mexico 87571

The Honorable Milton Herrera
Governor
Pueblo of Tesuque
Route 42, Box 360-T
Santa Fe, New Mexico 87506

Mr. Mark Mitchell
Tribal Historic Preservation Officer
Pueblo of Tesuque
Route 42, Box 360-T
Santa Fe, New Mexico 87506

Mr. Francisco Toribo
Tribal Historic Preservation Officer
Pueblo of Zia
135 Capitol Square Dr.
Zia Pueblo, New Mexico 87053-6013

The Honorable Antonio Medina
Governor
Pueblo of Zia
135 Capitol Square Dr.
Zia Pueblo, New Mexico 87053-6013

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

Dr. Henry Walt
Tribal Historic Preservation Officer
Pueblo of Isleta
P.O. Box 1270
Isleta Pueblo, New Mexico 87022

The Honorable Craig Quanchello
Governor
Pueblo of Picuris
P.O. Box 127
Penasco, New Mexico 87553

The Honorable Max A. Zuni
Governor
Pueblo of Isleta
P.O. Box 1270
Isleta Pueblo, New Mexico 87022

The Honorable Ron Lovato
Governor
Pueblo of Ohkay Owingeh
P.O. Box 1099
San Juan Pueblo, New Mexico 87566

The Honorable Eugene Herrera
Governor
Pueblo of Cochiti
P.O. Box 70
Cochiti Pueblo, New Mexico 87072

The Honorable Issac Lujan
Governor
Pueblo of Sandia
481 Sandia Loop
Bernalillo, New Mexico 87004

The Honorable Levi Pesata
President
Jicarilla Apache Nation
P.O. Box 507
Dulce, New Mexico 87528

Dr. Bruce Bernstein
Tribal Historic Preservation Officer
Pueblo of Pojoaque
78 Cities of Gold Road
Santa Fe, New Mexico 87506

Dr. Jeffrey Blythe
Tribal Historic Preservation Officer
Jicarilla Apache Nation
P.O. Box 507
Dulce, New Mexico 87528

The Honorable Joseph Aquilar
Governor
Pueblo of Santo Domingo
P.O. Box 99
Santo Domingo Pueblo, New Mexico 87052

The Honorable Phillip A. Perez
Governor
Pueblo of Nambe
Route 1, Box 117-BB
Santa Fe, New Mexico 87506

Mr. Ben Chavarria
Tribal Historic Preservation Officer
Pueblo of Santa Clara
P.O. Box 580
Espanola, New Mexico 87532

The Honorable Joseph M. Talachy
Governor
Pueblo of Pojoaque
78 Cities of Gold Road
Santa Fe, New Mexico 87506

The Honorable J. Michael Chavarria
Governor
Pueblo of Santa Clara
P.O. Box 580
Espanola, New Mexico 87532

USDA

United States Department of Agriculture

August 5, 2019

Mr. Mark Mitchell
Tribal Historic Preservation Officer
Pueblo of Tesuque
Route 42, Box 360-T
Santa Fe, New Mexico 87506

Re: Archeological Survey of the Santa Cruz River Watershed Dam Floodwater Retarding Structure No. 1 Location, Rio Arriba County, New Mexico (NMCRIS No. 133762)

Dear Mr. Mitchell:

The Natural Resources Conservation Service (NRCS) New Mexico State Office is in the process of developing a Supplemental Watershed Plan – Environmental Assessment for the Santa Cruz River Watershed Dam Floodwater Retarding Structure No. 1 to extend the functional life of the structure and to bring it up to current NRCS and New Mexico Office of the State Engineer design standards. The dam and surrounding area occur on private lands and lands administered by the Bureau of Land Management Taos Field Office (Attachment 1). The NRCS has been designated lead agency for completing cultural resource compliance with the National Historic Preservation Act.

The preferred alternative for rehabilitation is to raise the dam and provide a 71-year sediment storage capacity, along with protection from the 100-year – 24-hour storm event. This plan is detailed in Attachment 2.

An archeological survey of the project area by Aspen CRM Solutions, registered in the New Mexico Cultural Resource Information System as Activity 133762, resulted in the recordation of five newly reported archeological sites registered as Laboratory of Anthropology (LA) resources 182513-182515, 191725, and 191726, three newly reported Historic Cultural Property Inventory (HCPI) resources 38905-38907, and seventeen (17) isolated occurrences (Attachment 3).

The NRCS is recommending that archeological resources LA 182513, LA 182515, LA 191725, and historic structure HCPI 38906 (La Acequia de la Cañada Ancha) be considered eligible for listing on the National Register of Historic Places (NRHP).

Additional research is warranted to properly evaluate resource LA 182514 for eligibility to be included on the NRHP. For the purposes of this project, the resource will be treated as eligible for NRHP.

Resources LA 191726, HCPI 38905 (Santa Cruz Site 1 Dam and Spillway), and HCPI 38907 (unnamed earthen dam) are each recommended by the NRCS to be not eligible for inclusion to the NRHP as these resources do not meet criteria set forth in 36 CFR 60.4. Recordation has exhausted the data potential of these resources.

The noted isolates are each recommended as being not eligible for NRHP as the resources are each discrete in nature and do not have the potential to yield additional information important to the history or prehistory of the area.

The preferred alternative for rehabilitation of the dam will necessitate that a short segment (~25 meters) of the NRHP eligible La Acequia de la Cañada Ancha (HCPI 38907) be encased in pipeline. Per Appendix B of the Prototype Programmatic Agreement between the NRCS and New Mexico State Historic Preservation Officer, this effect is not adverse as the length impacted by the project is minimal compared to the overall total length of acequia.

Natural Resources Conservation Service
100 Sun Avenue N.E., Suite 602, Albuquerque, New Mexico 87109
Voice: (505) 761-4400 Fax: (855) 538-6003

To avoid potential adverse effects to the identified archeological sites considered to be eligible for inclusion to the NRHP or having an undetermined NRHP determination (e.g., LA 182513, LA 182514, LA 182515, and LA 191725), the NRCS is stipulating that these resources (with a 20-meter buffer) be avoided during all construction and rehabilitation efforts.

No treatment measures are being recommended for the noted isolates and resources considered to be ineligible for NRHP (e.g., LA 191726, HCPI 38905 and HCPI 38907).

The NRCS will consider implementation of the preferred alternative action for the Santa Cruz River Watershed Dam Floodwater Retarding Structure No. 1, following recommendations described above, to result in no adverse effect to historic properties.

If you wish to review the cultural resource survey and resource documentation or would like additional information regarding the project and Supplemental Watershed Plan – Environmental Assessment development, please contact NRCS State Cultural Resources Specialist William Volf, at (505) 761-4423 or via email at william.volf@usda.gov at your earliest possible convenience.

If you wish to participate in consultations regarding this project and development of the Supplemental Watershed Plan – Environmental Assessment, please provide any comments or concerns within 30 days of receipt of this letter to ensure efficient consultation process. We would like to encourage you to include comments or concerns regarding potential historic properties of religious or cultural importance to your community within the proposed project area. Likewise, if you do not wish to participate in consultation regarding this project, please provide a statement to that effect.

Sincerely,

J. XAVIER MONTOYA
State Conservationist

Attachments

cc: (w/attachments)
William Volf, State Cultural Resource Specialist, NRCS, Albuquerque, NM
Ayana Brown, Assistant State Conservation Engineer, NRCS, Albuquerque, NM

USDA

United States Department of Agriculture

August 5, 2019

The Honorable Milton Herrera
Governor
Pueblo of Tesuque
Route 42, Box 360-T
Santa Fe, New Mexico 87506

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Sincerely,

J. XAVIER MONTOYA
State Conservationist

Attachments

cc: (w/attachments)
William Volf, State Cultural Resource Specialist, NRCS, Albuquerque, NM
Ayana Brown, Assistant State Conservation Engineer, NRCS, Albuquerque, NM

State of New Mexico Consultation

MEETING MINUTES

To:	Meeting Attendees	Project:	Santa Cruz Site 1 Dam Rehabilitation
From:	Greg Allington, McMillen Jacobs Associates	Cc:	File
Date:	December 12, 2017	Job No:	[redacted]
Subject:	New Mexico Office of the State Engineer Dam Safety Bureau Meeting		

1.0 INTRODUCTION

1.1 Purpose

The objective of the meeting was to discuss the items for New Mexico Dam Safety Bureau coordination required for the Rehabilitation of Santa Cruz Site 1 Dam. This memorandum documents the meeting held in person at the New Mexico Office of the State Engineer (OSE) on December 12, 2017. The meeting started at 2:00 PM and was adjourned at approximately 4:00 PM Mountain Standard Time (MST).

1.2 Attendance

The following individuals participated in the conference call:

Name	Organization	Phone	email
Ayana Brown	NRCS New Mexico	505-761-4452	ayana.brown@nm.usda.gov
Jose Lopez	Santa Fe-Pojoaque SWCD	505-660-5828	josevarelalopez@aol.com
Chuck Thompson	NM OSE Dam Safety Bureau		
David Herber	NM OSE Dam Safety Bureau		
Greg Allington	McMillen Jacobs Associates	208-985-1499	allington@mcmjac.com
Bobbi Preite	McMillen Jacobs Associates	208-985-1542	preite@mcmjac.com
George Robison	McMillen Jacobs Associates		

2.0 MEETING DISCUSSION

The following items were discussed during the meeting.

1. McMillen Jacobs Associates (McMillen Jacobs) opened the meeting with an introduction, and review of the meeting agenda and meeting purpose.

2. A state requirement of draining the basin within 96 hours was discussed with the Dam Safety. It was noted that the dam is a few hours shy of meeting the requirement and a variance was wanting to be submitted to Dam Safety for preliminary approval. Dam Safety indicated that the approval needed to come from the New Mexico Water Rights Division. A contact for the Water Rights - Division was provided as Brian Gallegos at 505-827-6120.

3. The state dam width requirement was discussed. A dam crest width of 21.4 feet is required by the state for the current dam height of the structure. A 23.2 dam crest width would be required for a proposed raise of the structure. Dam Safety indicated that a waiver for the dam crest width could be obtained, but would need to include the justification for the width and ensure that the dam stability is met. Dam Safety indicated that a variance could be submitted one the verification of dam crest width and stability is available. Chuck Thompson indicated that he could provide a informal preliminary concurrence based on a review of the information.

4. The state requirement for seepage collars for the principal spillway conduit was discussed. Currently the principal spillway conduit has seepage collars and the Dam Safety requirements indicate they are not allowed. Dam Safety indicated that they would not require the seepage collars to be removed on an existing structure, and this requirement was primarily for new structures.

5. The retaining dike of the structure was discussed for the state requirements to be met for that structure. It was concluded that the retaining dike would be impounding water and would need to meet all applicable state requirements for a dam for the proposed height of the structure.

6. The proposed dam raise alternative was brought up with Dam Safety for comment and feedback. Dam Safety approved of the dam raise as long as the design met the state requirements and was stable and safe.

7. A question was raised by McMillen Jacobs about state funding for the project. Dam Safety indicated that there are three steps to request funding and funding may be available. The three steps included; 1) The sponsor would need to submit an application to the Water Trust Board for the funding; 2) Legislators would need to make a capital outlay request; 3) Coordination with the state engineer would be required to make the request. The sponsor would submit the application after the planning process was completed.

8. The EAP for the structure was discussed. The Santa Fe-Pojoaque SWCD noted that they would have the EAP to Dam Safety by the end of the year. Inundation maps to be submitted for the EAP would be provided to USDA-NRCS by McMillen Jacobs Associates. The maps and Hydrology and Hydraulics (H&H) report would be submitted to support the EAP. Once Dam Safety had an opportunity to review the EAP and associated inundation mapping and H&H they would likely request the model data. Dam Safety could provide and interim approval for the EAP with this information.

3.0 ACTION ITEMS

Action items that came out of the meeting included the following.

1. McMillen Jacobs is to update the concept design to ensure the retaining dike is designed to meet the state requirements for a jurisdictional dam.
2. McMillen Jacobs is to provide USDA-NRCS with the inundation maps and H&H Memo completed for the project.
3. USDA-NRCS is to provide the inundation maps to the sponsor after receiving from McMillen Jacobs.
4. McMillen Jacobs to submit variance package for 96-hour draining requirement to the Water Rights Division when it becomes available.
5. McMillen Jacobs to submit dam width variance to Dam Safety when it becomes available.