

**United States Department of the Interior
Bureau of Land Management**

**Determination of NEPA Adequacy
Erosion Control Project within Punche-Arroyo-
Rio Grande Watershed**

San Luis Valley Field Office
Monte Vista, Colorado 81144

DOI-BLM-CO-FO3-2015-014-DN

July 2015



OFFICE: San Luis Valley FO, Front Range District (LLCOF03000)

PROJECT NUMBER: DOI-BLM-CO-FO3-2015-014-DN

CASEFILE: (if applicable)

PROPOSED ACTION TITLE/TYPE: Erosion Control Project within Punche-Arroyo-Rio Grande Watershed

LOCATION/LEGAL DESCRIPTION:

New Mexico Principal Meridian, Colorado

T. 32 N., R. 11 E.,

secs. 9, and 10.

T. 33 N., R. 11 E.,

secs. 3, 4, 8 thru 10, 14, 15, 17, 19 thru 22, 27, and 28.

T. 34 N., R. 11 E.,

secs. 3, 4, 21 thru 23, 26 thru 28, and 32 thru 35.

T. 35 N., R. 11 E.,

sec. 34.

APPLICANT (if any): BLM-SLVFO

A. Description of the Proposed Action and any applicable mitigation measures

The San Luis Valley BLM proposes to construct erosion control structures on ephemeral drainages and head-cuts located within Punche Arroyo-Rio Grande watershed, which are supplying sediment load to Rio Grande (Figure 1). Sixty-two erosion control structures have been proposed to be constructed within the watershed. Construction of these structures will be completed in phases over the next several years. For this year (2015), the proposed soil erosion control project will start at site #44 (Figure 1). The conservation work will continue in the future based on availability of funding. Prioritizing projects will mainly be based on the severity of erosion potential of the sites. This project will not disturb extensive areas and is beneficial in the long-term in restoring watershed health.

Erosion control structures such as One-rock structures, Zuni bowls, Media lunes, and Rock mulch rundowns (Figures 2 and 3) have been proposed to be placed along these ephemeral drainages to hold moisture behind the structures, decrease sedimentation, and allow vegetation to expand. Long-term goal is to re-establish natural vegetation to hold soil in place so that little maintenance is required. Structures that control head-cuts (Figure 3) have been also proposed to reduce gullies migrating upslope, which result in soil loss, soil productivity, impact aquatic habitat, and lowering of water tables. In addition, culvert replacement and closure of illegal roads have been also proposed. No new roads will be constructed during the implementation of this project. Rock and other erosion control materials needed for the structures will be brought in from local quarries and construction is prohibited from May 15th to September 15th to avoid

affecting the Southwestern Willow Flycatcher at site 44. These structures will not impound water. This project will improve and increase vegetation habitat that would help to further trap sediment to the Rio Grande.

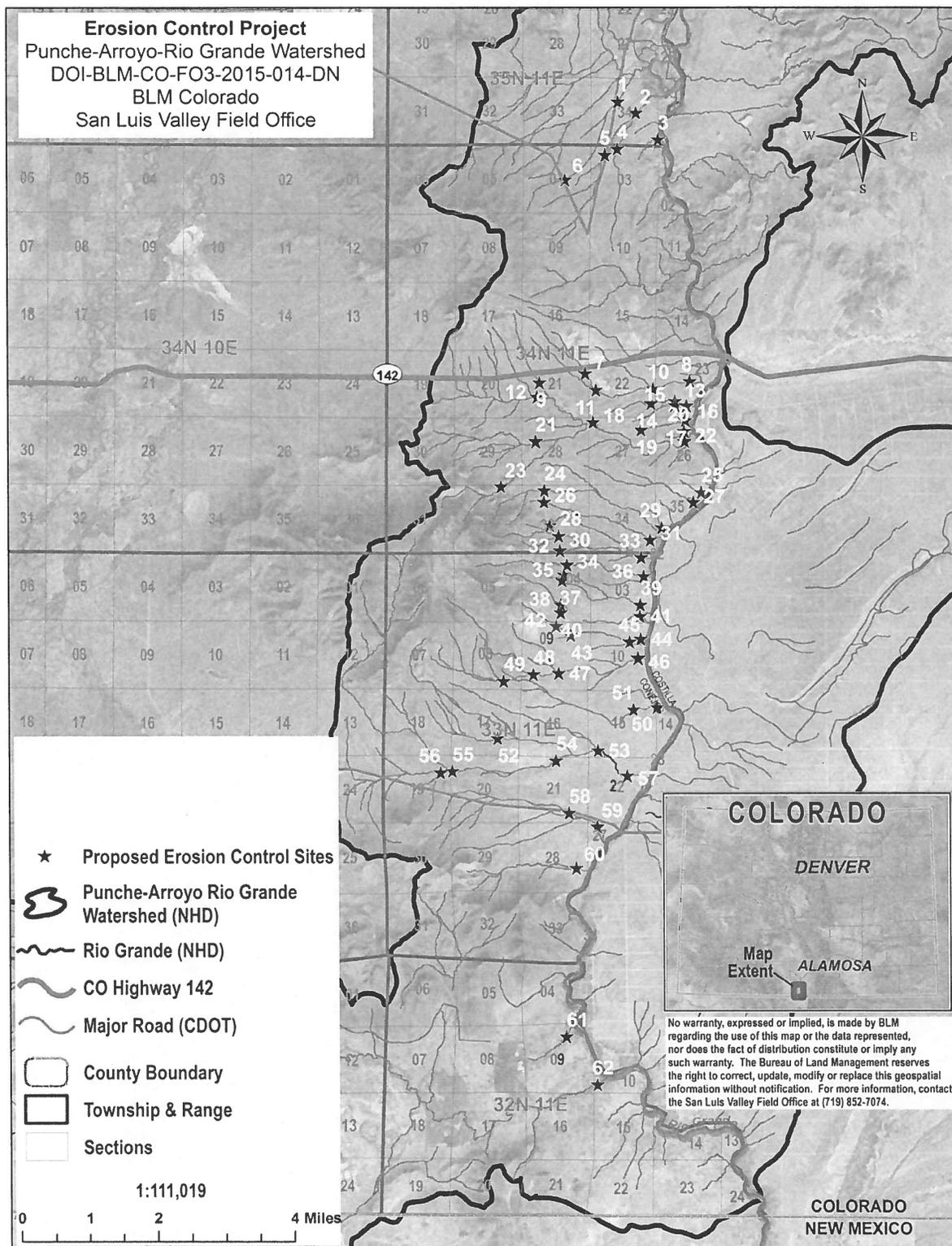


Figure 1 Location Map

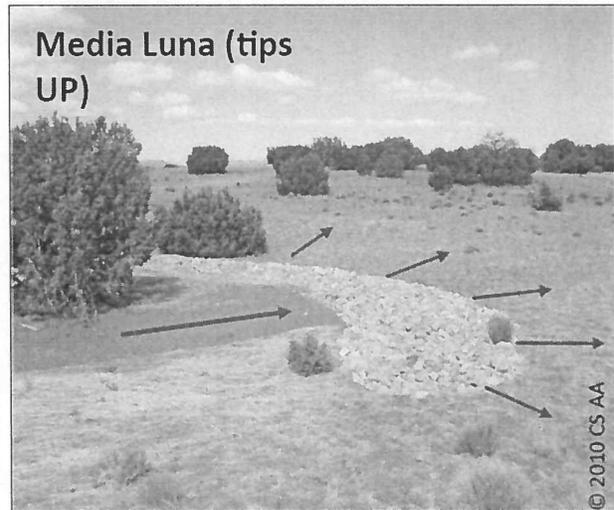
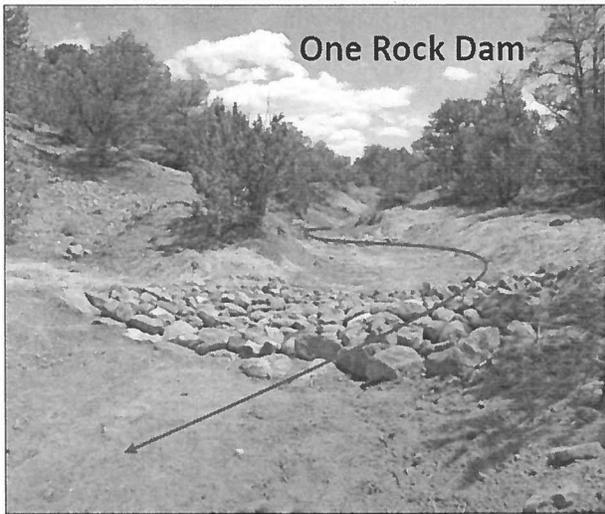


Figure 2 - Proposed erosion control structures.

Source: Sponholtz, Craig and Anderson, Avery. 2010. Erosion Control Field Guide, the Cuivira Coalition and Dryland Solution Inc

ROCK MULCH RUNDOWN*

headcut pour-over

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1. Layout 3:1 slope over upland headcut.

2. Layback slope, compact soil, scatter seed.

3. Cover new slope with cobble mulch.

4. Time and precipitation will produce plant cover.

splash apron

* Use only in *low energy* headcuts (NOT in-channel headcuts!)



Figure 3 Detailed site and project specification for two erosion control sites
(Source: Sponholtz and Anderson, 2015)

B. Land Use Plan (LUP) Conformance

San Luis Resource Area Resource Management Plan (RMP)	Date Approved 12/18/1991
Environmental Assessment for Watershed and Fisheries Conservation Treatments	Date Approved 2005

The proposed action is in conformance with the applicable LUP because it is specifically provided for in the following LUP decisions:

Wildlife and Fish Habitat 1-10: Manage wetlands component of the riparian systems in a good to excellent conditions.

Wildlife and Fish Habitat 1-11: Manage streams to maintain the fisheries potential.

C. Identify applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

List by name and date all applicable NEPA documents that cover the proposed action.

Environmental Assessment for Watershed and Fisheries Conservation Treatments, 2005.

List by name and date other documentation relevant to the proposed action (e.g., biological assessment, biological opinion, watershed assessment, allotment evaluation, and monitoring report). None found.

D. NEPA Adequacy Criteria

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?

Yes. The Watershed and Fisheries Conservation Treatments EA analyzed on a programmatic scale the need and uses of erosion control structures to maintain/ improve riparian resources and fisheries habitat to a healthy state.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values? The existing proposed action included treatments that would help restore, reclaim and protect soil, water, and fisheries resources. The treatments, in the existing proposed action, include construction of rolling grade dips, waterbars, check dams, streambank stabilization, fisheries structures, soil subsoiling/ aeration measures, erosion control structures, sediment traps, revegetation, fertilization, mulching, topsoiling, bioremediation, wetland enhancement or creation, and applying organic materials. The treatments also include practices that address road and trail issues, such as ripping, subsoiling, waterbarring and removing, installing, or maintaining culverts, correcting drainage problems, applying gravel on roads to harden crossings, applying buffer strips and physical barriers. Fisheries treatments include, among others, rock placements, jetties and fish barriers. The other alternative that was analyzed in the 2005 EA was the no change alternative which maintained the current system of doing business relative to watershed and fisheries conservation treatments.

3. Is the existing analysis valid in light of any new information or circumstances (such as, rangeland health standard assessment, recent endangered species listings, and updated lists of BLM-sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action? The information and circumstances surrounding Watershed and Fisheries Conservation Treatments are unchanged from the previous analysis. No new evidence or circumstances have arisen that would change the analysis.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

Yes. There are no negative direct or indirect impacts associated with the proposed action. The impacts analyzed in the Watershed and Fisheries Conservation Treatments EA remains unchanged.

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action? Yes. Public scoping was conducted for the previous NEPA analysis.

E. Persons/Agencies /BLM Staff Consulted

INTERDISCIPLINARY TEAM REVIEW			
NAME	TITLE	AREA OF RESPONSIBILITY	Initials/date
Joel Humphries	Wildlife Biologist	Terrestrial Wildlife, T&E, Migratory Birds, Fisheries	JTH 7/15/2015
Melissa Shawcroft	Range Management Spec.	Range, Vegetation, Farmland	MS 7/13/2015
Eduardo Duran	NRS, Invasive Plants Coordinator	Riparian, T&E species, and Invasive Plants	END 7/8/2015
Rebecca Morris	Physical Scientist	Minerals, Paleontology, Waste Hazardous or Solid	RM 07-08-2015
Negussie Tedela	Hydrologist	Hydrology, Water Quality/Rights, Soils, Air Quality	NHT 07/07/2015
Sean Hines/Leon Montoya	Cadastral Surveyor	Cadastral Survey	SJH 07/07/2015
Sean Noonan	Outdoor Recreation Planner	Recreation, Wilderness, LWCs, Visual, ACEC, W&S Rivers,	TN, 7/6/15
Martin Weimer	NEPA Coordinator	Environmental Justice, Noise, SocioEconomics	mw, 7/16/15
Brian Fredericks	Archaeologist	Cultural, Native American	BAF 07/13/2015
Leon Montoya	Realty Specialist	Realty	LAM 07/09/2015
Jill Lucero/Sue Swift-Miller	Wetlands Biologist	Wetlands	SSM 07/09/2015
Paul Minow	Fire/ Fuels Specialist	Fire/ Fuels	PM 07/09/2015

Other Agency Represented:

REMARKS:

Cultural Resources:

Cultural resource inventory of lands involved with specific project proposals must be done in project planning stages to identify any National Register of Historic Places eligible cultural resources. Mitigation or avoidance could then be used to protect National Register of Historic Places eligible cultural resources.

All persons who are associated with this project shall be informed that any person who, without a permit, injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or

archaeological resources on Public Lands is subject to arrest and penalty of law (16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361). Strict adherence to the confidentiality of information concerning the nature and location of archeological resources would be required of the proponent and all of their subcontractors (Archaeological Resource Protection Act, 16 U.S.C. 470hh).

All work in the vicinity of the resource will cease and the Authorized Officer will be notified immediately if subsurface cultural values are uncovered during operations. The operator shall take any additional measures requested by the BLM to protect discoveries until they can be adequately evaluated by the archaeologist. The SHPO and consulting parties will be notified of the discovery and consultation will begin to determine an appropriate mitigation measure within 48 hours of the discovery. BLM, in cooperation with the operator, will ensure that the discovery is protected from further disturbance until mitigation is completed. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

Pursuant to 43 CFR 10.4(g), the holder must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery that could adversely affect the discovery. The holder shall make a reasonable effort to protect the human remains, funerary items, sacred objects, or objects of cultural patrimony for a period of 30 days after written notice is provided to the authorized officer, or until the authorized officer has issued a written notice to proceed, whichever occurs first.

Native American Religious Concerns: No Native American concerns.

Vegetation: Details related to the size of the proposed disturbance areas and the related direct and indirect impacts these actions would have upon existing native vegetation was not mentioned nor analyzed in the EA. The document basically listed many long term benefits to the proposed action to vegetation in the future but did not address direct and indirect impacts to the vegetative resource from physically reshaping the current landscape with machinery.

Existing vegetation would be disturbed through mechanical means to reshape and recontour gullies, etc. However beneficial the proposed activities would have on public lands for the long term, there are impacts to the existing native vegetation at the time of construction of the proposed projects.. These impacts are related to disturbances caused by heavy machinery in the act of modifying the intended landscape.

Treatments are addressed in the final EA once the landscape is modified such as reseeding the area but seed mixtures are not addressed as to how and who is to perform these reseedings. It is recommended that the range specialist be consulted to provide a recommended seed mixture and seeding rate prior to reseeding disturbed sites.

Threatened and Endangered Species:

Sites along the Rio Grande Corridor could potentially be in or located near habitat with sedges, rushes, willows, or cottonwood galleries. The southwestern willow flycatcher (endangered),

yellow-billed cuckoo (threatened), and the New Mexico meadow jumping mouse (endangered) are three species that are listed under the Endangered Species Act of 1973 (ESA; 16 U.S.C. § 1531 et seq.), which have the potential occur in the riparian habitat located near the Proposed Action sites. Each site listed in DOI-BLM-CO-F03-2015-014DNA will need a site specific evaluation prior to construction to adequately analyze the potential effects on the aforementioned listed species.

The site that has construction proposed for this year, site 44, is located in upland habitat, but it is also within 50 meters of riparian habitat with a few young short willows, and some sedges and rushes less than 6 inches tall. Site 44 has designated southwestern willow flycatcher critical habitat within 43 meters. All construction activities would occur outside designated critical habitat, and critical habitat would not be affected from construction activities or restoration taking place in the uplands. Along the river corridor, the flycatcher may use the area as temporary stopover habitat during migration, but the habitat is not sufficient for nesting or breeding. The proposed construction at site 44 is less than one acre, and if the Proposed Action is implemented, it would not reduce prey abundance or availability for the flycatcher. The flycatcher is not present in the San Luis Valley from September 16th to May 14th, and construction should happen in that timeframe to avoid any potential adverse effects to migratory or foraging flycatchers. Sites 3, 16, 17, 20, 22, 25, 27, 29, 31, 33, 36, 39, 41, 46, and 50 are less than 250 meters from southwestern willow flycatcher designated critical habitat, which will require additional analysis and a field visit by the Wildlife or Wetland Biologist(s) to determine potential effects to critical habitat and flycatchers from any additional surface disturbance or disruptive activities. Additional sites may need future evaluation too, and the project proponent should consult with the biologist(s) with any new surface disturbing or disruptive activities not covered in this document.

New Mexico meadow jumping mouse (NMJM) habitat is in riparian communities along rivers, streams, wetlands, springs, or canals and ditches that have flowing water that saturates soil, and the average herbaceous stubble height is 24 inches high. The preferred riparian understory habitat is composed of primarily of sedges and forbs, and shrub overstory willows or alders. The dense riparian cover provides both forage consisting of insects and grass seeds, and material to build day nests protecting the mice from predators. NMJM suitable habitat patch size is 27.5 to 73.2 hectares (68 to 181 acres) along 5.6 miles to 15 miles of flowing streams, ditches, or canals of contiguous suitable habitat. NMJM exhibit extreme site fidelity for daily activities (i.e. movements from day nests to feeding areas). For 8 to 9 months of the year, NMJM are in hibernacula that can extend 100 m from the dense riparian vegetation into adjacent uplands. The mouse is only active during the summer months.

Site 44 is within 44 meters of riparian vegetation, but the vegetation along the this Rio Grande River is insufficient to support New Mexico meadow jumping mouse. In this area, the stubble height of the vegetation is less than 8 to 10 inches. There are no large 68 to 181 acre areas with sedges and forbs with an average stubble height of 24 inches nearby, or suitable contiguous habitat of 5.6 miles to 15 miles nearby. Approximately 1.5 miles to the north there is marginal NMJM habitat along the Rio Grande, but that stretch of habitat is 3.2 miles long and does not meet the requisite average stubble height of 24 inches. NMJM lack mobility do not travel long distances. The longest movement of NMJM from radio telemetry data from a study on the Bosque del Apache NWR was 3,280 feet, and 95% of the time movements were less than 630 feet. The Proposed Action would have no effect on NMJM at site 44 because the habitat is not

present near the site and other potential habitat patches are too far away for even a dispersing mouse to be present in the area.

The vegetation for sites 3, 17, 25, and 29 are within 100 meters of riparian habitat and will require a field visit to determine the potential for NMJM occupancy in these areas.

The western yellow-billed cuckoo utilizes riparian habitat with willow and cottonwood. The Rio Grande River does not have cottonwood galleries near site 44, and the cuckoo does not have the potential to occur near or around site 44. There is no proposed critical habitat for yellow-billed cuckoo at any of the sites, but this will be reevaluated when final critical habitat is designated for the cuckoo.

Noxious Weeds/Invasive Plants:

During construction activities of this project, ground disturbed areas and off-site materials used could increase the likelihood of noxious weeds/invasive plants becoming established and/or spread in the project sites. Prior to construction activities, all equipment will be washed. Any project sites heavily disturbed by construction activities will need to be reseeded with native, weed-free seed mix within two weeks after completion of construction.

MITIGATION:

- Construction of new roads is prohibited
- Implementation of the proposed action must adhere to all closure
- Implementation of the proposed action must be implemented during dry periods
- All rock and other material brought in must be weed-free
- Construction is prohibited from May 15th to September 15th to avoid affecting the Southwestern Willow Flycatcher at site 44.
- Avoid construction activities within designated critical habitat for southwestern willow flycatchers.
- Avoid construction activities within proposed critical habitat for yellow-billed cuckoo.
- Avoid construction activities within potential New Mexico jumping mouse riparian habitat.
- The Wildlife Biologist and/or Wetlands Biologist must be consulted with prior to any construction, surface disturbing, or disruptive activities .
- Native seed mixtures must be approved by the BLM Range Specialist.
- The Range Mgt. Specialist must be notified prior to activity taking place in the grazing allotments. Gates will need to be closed as well.
- Remove the cause of the active head-cutting by removing the trespass horses that are grazing the area year round and have been for several years.

CONCLUSION

DOI-BLM-CO-200-2015-0014 DN

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of the NEPA.

SIGNATURE OF PROJECT LEAD:

SIGNATURE OF NEPA COORDINATOR: /s/ Martin Weimer

SIGNATURE OF AUTHORIZED OFFICIAL:


Andrew Archuleta, Field Manager

DATE SIGNED:

7/23/15

Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.