



United States
Department of
Agriculture

Forest Service



Santa Fe
National Forest,
Region 3

September 30, 2010

DECISION NOTICE AND FINDING OF NO SIGNIFICANT IMPACT

RESTORATION OF LOS ALAMOS DAM AND RESERVOIR

Project Number: 27177
Espanola Ranger District
Santa Fe National Forest
Los Alamos County, New Mexico

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DECISION

INTRODUCTION

The Environmental Assessment (EA) for the Restoration of Los Alamos Canyon Dam and Reservoir was prepared by an Interdisciplinary (ID) team. The EA discusses the reasons for taking action in the project area, which include resolving safety deficiencies associated with the existing Los Alamos Canyon Dam and Reservoir (the facility), while preserving the existing uses for the facility, which include water supply and recreation. The EA discusses environmental effects of dam and reservoir restoration activities at the facility.

The EA is available for public review at the Española Ranger District Office located at 1710 N. Riverside Drive, Española, New Mexico 87532. The Española Ranger District Office telephone number is (505) 753-7331.

DECISION

Based upon my review of the alternatives and the analysis in the EA, I have decided to approve the Proposed Action, as described under Alternative 2 of the EA. The Proposed Action includes the issuance of a permit to the County that would authorize repair and improvement activities at the facility. The repair and improvement activities would include re-contouring the slopes of the dam walls to achieve a more gradual slope, re-enforcing the downstream face to withstand overtopping during flooding, repairing the gate tower structure and other damaged concrete at the facility, re-constructing the spillway to accommodate normal outflow from the reservoir, building a “trainer wall” (side walls) to channel the flood waters over the top of the dam and to protect the sides from washouts, constructing a stilling basin at the toe of the dam to dissipate energy, and to place an earthen cap over the down-slope side of the dam to allow grassy vegetation to cover the concrete for aesthetic purposes.

Activities under this alternative would involve removing some material from the existing dam structure to prepare the surface for rehabilitation. The first step in construction would be improving an existing pipeline that diverts water from the canyon upstream of the reservoir inlet around the dam to downstream of the dam. After diverting the water, a gunite and wire mesh layer on top of the existing dam surface would be removed to prepare the construction surface. Then, a portion of the existing concrete wall on the reservoir side of the dam would be reduced to achieve a 3:1 slope. This material would be removed from the construction site and disposed of at the Los Alamos County Solid Waste Disposal Facility.

Once the dam surface has been prepared and existing materials have been removed, sand and gravel would be imported to the facility. Up to two (2) feet of sand would be placed on top of the dam. This sand layer would serve as a drain and would collect water that seeps through the structure, relieving hydraulic pressure that builds upstream of the dam. Material from the lake bed would then be excavated and used as fill to shape the dam surface to achieve a slope of 3H:1V. A layer of gravel up to 2-feet thick would be placed on top of the fill to serve as an additional drain for seepage water. Roller-compacted concrete would then be placed on top in layer approximately 10-feet thick. Concrete would not be batched on site. Instead, concrete would be batched at the existing concrete plant on East Jemez Road, approximately three (3) miles from the dam site, and transported to the facility using dump trucks. The haul road would be East Jemez Road to Diamond Drive, then west on West Road into Los Alamos Canyon, then following FR 182 (unpaved) to the facility (Figure 2).

Concrete would be delivered to the dam and heavy equipment (e.g., bulldozers) would be used to spread the delivered load onto the dam surface. After spreading the concrete on the dam, the concrete would be compacted using vibratory rollers. Sections of the dam would be built from the bottom to the top in a lift-by-lift method, where each load is placed on top of the lower-most working surface and the structure is built up. This construction method would require concrete delivery to be 24-hours per day until construction were completed. Under this alternative, it is anticipated that concrete-delivery traffic would occur over a 10-day period, 24 hours per day. Before the concrete completely sets, heavy equipment would be used to smooth the corners of the roller compacted concrete to provide a more uniform slope. The final step would be to place 3 feet of soil on top of the roller compacted concrete. This layer would not be structural, but would rather serve to prevent the downstream dam from vandalism, such as graffiti, and to mitigate any visual impacts from a large concrete face within the Forest.

REASONS FOR THE DECISION

The selected alternative best meets the project purpose and need and achieves desired conditions in the following ways:

- The alternative will meet the New Mexico Dam Safety OSE regulations.
- The alternative will have a long-term, indirect, beneficial effect on public health and safety.
- Not implementing the selected alternative would continue to pose a risk to human health.
- The alternative is consistent with the 1987 Santa Fe National Forest Plan management goals and objectives.

OTHER ALTERNATIVES CONSIDERED

In addition to the selected alternative, one other alternative (No Action) was also considered, and is summarized below. A comparison of the effects of these alternatives is found in Chapter 2 of the EA.

Alternative 1: No Action. Under the No Action alternative, current management plans would continue to guide management of the project area. No Permit would be issued by the Forest Service and the County would not implement any repairs or improvements to accomplish project goals. The facility would continue to be classified as having a high hazard potential and fail to meet the Dam Safety Regulations established by the OSE. Because these safety deficiencies would not be addressed, the facility would not provide adequate flood protection downstream of the project area and would remain as-is under its current Special Use Permit

FUTURE REVIEW OF THE DECISION

In accordance with Forest Service Handbook direction [FSH 1909.15(18) and 2209.13(96)], an interdisciplinary review of the decision will occur within 10 years, or sooner if conditions warrant.

PUBLIC INVOLVEMENT

The proposal for the Los Alamos Canyon Dam and Reservoir repairs was listed in the Schedule of Proposed Actions on January 9, 2009. The proposal was provided to the public and other agencies for comment during scoping in December 2008. In addition, as part of the public involvement process, on December 19, 2008 the agency distributed a public scoping letter that described the proposed action and solicited public comment on the project to interested and affected parties that are listed at the end of this document. One comment letter and two requests to remain on or be added to the project mailing list were received by the Forest Service in response to the public scoping letter. The comment letter explained concern for impacts to water quality and wildlife from construction activities. In addition to these concerns, the Forest Service received a phone call from a Native American tribe regarding the dam, which was formerly eligible for the National Register as a historic site. The tribe was concerned that a cultural resources site may be within the project area. However, the site of concern was the dam, which is no longer eligible for the National Register.

Using the comments from the public, other agencies, and Native American Tribes and Pueblos (see Issues section of the EA), the interdisciplinary team (IDT) developed a list of issues to address.

On March 12, 2010 the *Proposed Action and Alternatives for 30-Day Comment for the restoration of Los Alamos Canyon Dam and Reservoir* was made available for the 30 day notice and comment period. The proposed action was mailed to fifteen interested parties. A legal notice was published in the Albuquerque Journal on March 17, 2010 notifying the public on the start of the comment and notice period. The District received three responses during the formal 30-day comment period. No new alternatives or significant issues were identified during the 30 day comment period.

FINDING OF NO SIGNIFICANT IMPACT

After considering the context and intensity of the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment as defined in the Council on Environmental Quality implementing regulations at 40 CFR 1508.27. Thus, an environmental impact statement will not be prepared. I base my finding on the following:

Context: The action is a site-specific action that by itself does not have international, national, region wide or statewide importance. Effects are limited to the locale of the Los Alamos dam and reservoir.

Intensity: The following discussion is organized around the ten significance criteria described in the National Environmental Policy Act (NEPA) regulations at 40 CFR 1508.27.

1. Both beneficial and adverse impacts were considered in the analysis (EA, Chapter 3, pp. 14 - 24). Dam and reservoir restoration as proposed will result in increased traffic on Jemez Road, Diamond Drive, and West Road during the 10-day concrete delivery phase. Disturbance of suitable wildlife habitat during breeding season is also a potential adverse effect. In addition, construction may affect soil stability, which in turn would degrade water quality by increasing sediment load entrained in the surface water if discharged into the stream. These adverse effects have been reduced or eliminated through project design and mitigation measures (EA pp. 7- 11).
2. No significant effects on public health and safety were identified. Restoring the Facility to meet New Mexico Dam Safety OSE regulations under the Proposed Action alternative would have a long-term, indirect, beneficial effect on public health and safety. The enhanced safety features of the Facility under the Proposed Action, including re-enforcing the downstream face to withstand overtopping during flooding, repairing the gate tower structure and other damaged concrete at the Facility, re-constructing the spillway to accommodate normal outflow from the reservoir, building a trainer wall to channel the flood waters over the top of the dam and to protect the sides from washouts, and constructing a stilling basin at the toe of the dam to dissipate energy, would each reduce the risk of failure and potential loss of human life. As a result, the Proposed Action would have a long-term, indirect, positive effect on the safety of the downstream structures and property improvements.
3. Through project design and mitigation measures, the project will not adversely affect parks, prime farm lands, wetlands, wild and scenic rivers, or other resources considered to have unique characteristics.
4. The effects on the quality of the human environment are not likely to be highly controversial. The environmental analysis process has documented the expected environmental effects of the proposed action and no action alternatives. These effects have been disclosed in Chapter 3 of the EA and the selected action has been designed and mitigated to address the various issues raised.
5. The effects analysis indicates the effects are not uncertain, and do not involve unique or unknown risk. The Forest Service has considerable experience with the types of activities to be implemented. The effects described in the EA are based on the judgment of experienced resource management professionals using the best available information.
6. The decision to issue permits for the restoration of dams and reservoirs does not establish a precedent for future actions with significant effects. Future actions will be evaluated through the NEPA process and will stand on their own as to environmental effects and project feasibility.
7. The cumulative impacts of the action on soils, vegetation, and terrestrial and aquatic wildlife resources were considered and disclosed in Chapter 3 of the EA. The direct and indirect effects of the proposal are expected to be minor in the short term and beneficial over the long term. None of the effects are considered significant for reasons described herein. No past or future actions have been identified that will combine with the effects of the proposed action to cause cumulatively significant effects.

8. The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. The action will also not cause loss or destruction of significant scientific, cultural, or historical resources. Mitigation measures included as part of the selected alternative are designed to preclude adverse effects to these resources. The proposed action includes provisions to survey for and avoid sensitive heritage sites prior to any ground-disturbing activities.
9. A Heritage Resources survey and evaluation report was prepared and submitted to the State Historic Preservation Office (SHPO) as part of an earlier project conducted in 1992 (SFNF Report # 1992-10-122; Bremer, J. Michael). The project was conducted for improvements and maintenance activities associated with the Dam. During that project, heritage site AR-03-10-06-842/LA 90538, the historic dam site and reservoir was documented. In consultation with the SHPO, the site was determined to be not eligible for inclusion in the National Register of Historic Properties because the integrity of the site had been compromised by repeated improvements. There will be no effect to heritage resources as a result of the Restoration of Los Alamos Canyon Dam and Reservoir Project.
10. No formal consultation with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the Endangered Species Act was not required because there would be no effect on sensitive species under the Proposed Action. Mitigation practices have been incorporated into the proposed actions that are sufficient to avoid effects to other wildlife species habitat (EA p. 11).
11. This selected alternative is in full compliance with all federal, state and local law requirements imposed for environmental protection. Best Management Practices (Mitigation Measures) to protect water quality are included in the selected alternative (EA p. 11-13).

FINDINGS RELATED TO OTHER LAWS

National Forest Management Act: The Santa Fe National Forest Plan was adopted on July 1987 and has been amended several times. The 2005 Forest Service planning regulations state that projects must be consistent with the plan (36 CFR 219.8 (e)). The Santa Fe National Forest Land and Resource Management Plan provides direction and standards for the management of lands in and adjacent to the project area. Specifically, the project area falls within Management Area C of the Forest Plan, which describes a management emphasis on visual quality and developed recreation opportunities while protecting essential wildlife habitat and riparian zones. Other NFMA consistency findings relate to the management of suitable timberlands. The project area does not contain any suitable timberlands; therefore, the other NFMA consistency requirements do not apply.

My conclusions regarding the effects of the proposed action are based on a thorough review of the relevant scientific information and consideration of responsible opposing views; and the acknowledgement of incomplete or unavailable information, scientific uncertainty, and risk.

Multiple Use Sustained Yield Act: The selected alternative will not impair land productivity and is therefore consistent with this law.

Endangered Species Act: No formal consultation with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the Endangered Species Act was required because there would be no effect on sensitive species under the Proposed Action. Mitigation practices have been incorporated into the proposed actions that are sufficient to avoid effects to other wildlife species habitat (EA p. 11).

National Historic Preservation Act: A previous heritage survey and evaluation was conducted in 1992. Concurrence from SHPO on Effect and Eligibility was received on January 21, 1993.

Executive Order 13186 (Migratory Birds): There are no identified effects on migratory birds, Birds of Conservation Concern, or Important Bird Areas.

Executive Order 12898 (Environmental Justice): This decision does not impose disproportionately high adverse human health or environmental effects on minority or low-income populations.

ADMINISTRATIVE REVIEW OR APPEAL

This decision is subject to appeal in accordance with regulations at 36 CFR 215. Individuals or organizations that provided comments or otherwise expressed interest in the proposed action during the March 2010 comment period. A notice of appeal must be in writing and clearly state that it is a Notice of Appeal being filed in pursuant to 36 CFR 215. Appeals must be filed (regular mail, email, fax, hand-delivery, or express delivery) with the Appeals Deciding Officer, Erin Connelly, Acting Forest Supervisor, Santa Fe National Forest, P.O. Box 1689, Santa Fe, New Mexico, fax: (505) 438-5390, email: appeals-southwestern-santafe@fs.fed.us (email message, .doc, rtf or .txt formats only). If hand-delivered, the appeal must be received at the above address during business hours (Monday-Friday 8:00 am to 4:30 pm), excluding holidays.

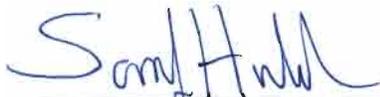
Appeals, including attachments, must be in writing, consistent with 36 CFR 215.14 and filed (postmarked) within 45 days of the date of legal notice of this decision in the *Albuquerque Journal*. This publication date is the exclusive means for calculating the time to file an appeal. Those wishing to appeal this decision should not rely on dates or timeframes provided by any other source.

For additional information concerning this decision or the Forest Service appeal process, contact Sanford Hurlocker, Española District Ranger or Donald Serrano, Española Range Staff at (505) 753-7331.

IMPLEMENTATION DATE

If no appeals are filed within the 45-day filing period, implementation of the decision may occur on, but not before, five business day from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition. Implementation means actually issuing the new permit or accomplishing any ground disturbing actions. Field preparation work needed to implement this decision may proceed immediately.

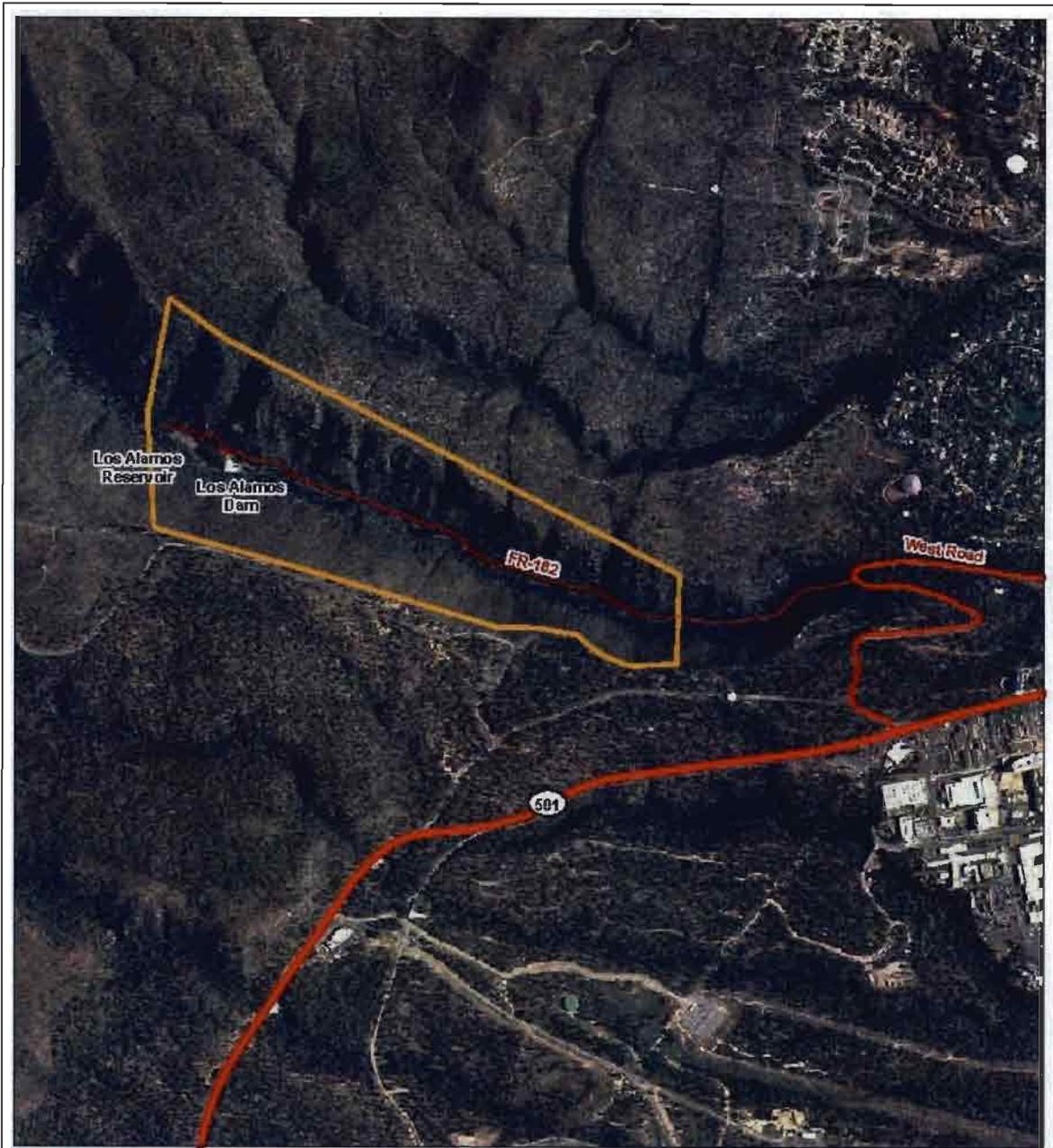
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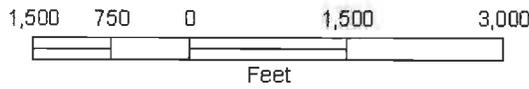
SANFORD HURLOCKER
Española District Ranger

5 Oct 2010

Date



NORTH
 UTM Zone 13, NAD 1927



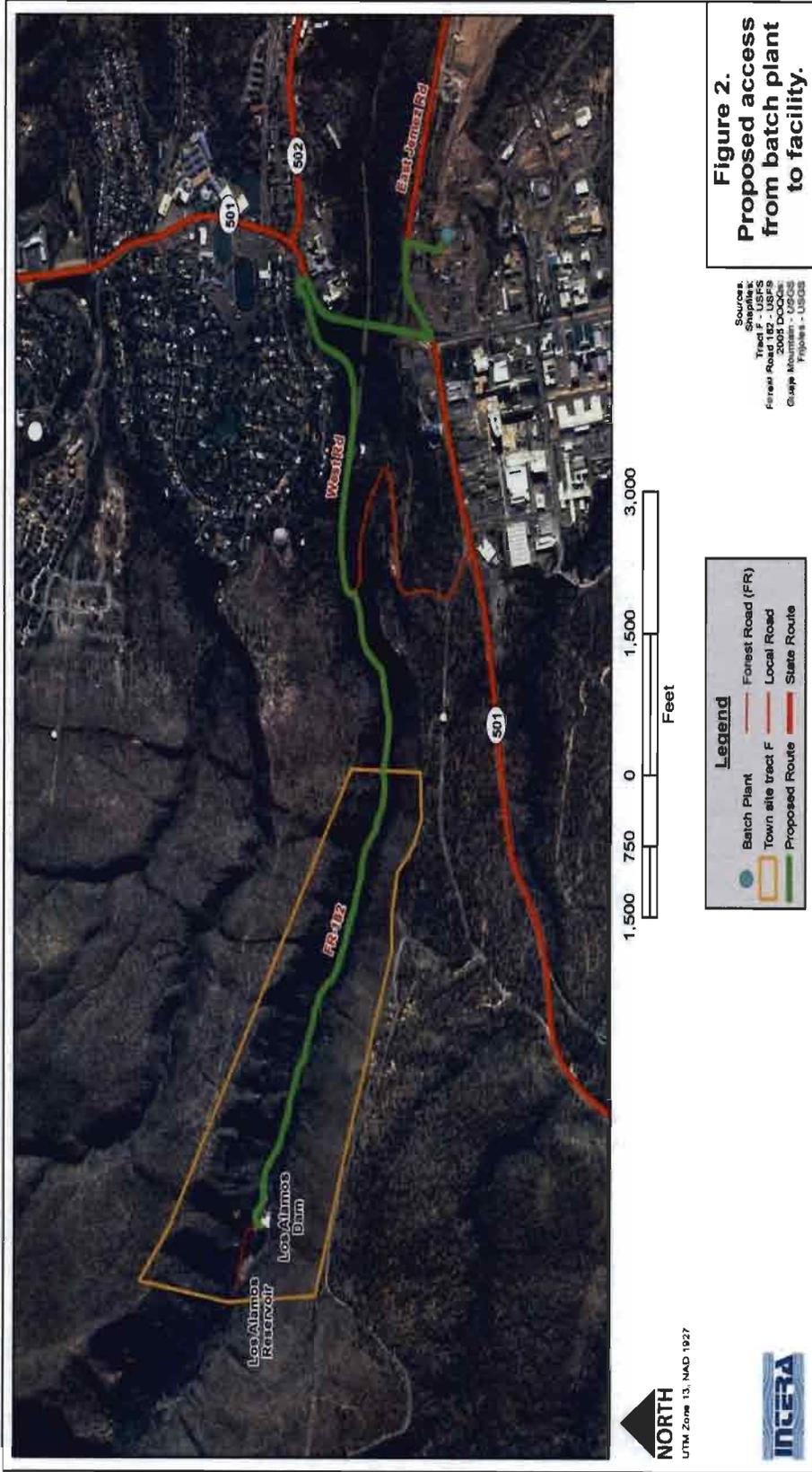
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 Forest Road 182 - USFS
 State Route 501 - USGS
 Grid Mosaic - USGS
 Forests - USGS



Legend	
	Forest Road (FR)
	Local Road
	State Route
	Town site tract F

Figure 1.
Location of
proposed action.

FILE: S:\P\cda\140_001_Los Alamos\01\140111_01\001\Map Documents\FONSI\Fig 1.mxd 05/26/2009



APPENDIX A - MITIGATION MEASURES

In response to public comments on the proposal, mitigation measures were developed to ease some of the potential adverse environmental impacts the various alternatives may cause. The mitigation measures may be applied to any of the action alternatives.

The action alternative (Alternative 2) will include the following design criteria, which include Forest Plan Guidelines and Standards, and mitigation measures:

Public Health and Safety

To protect the public from potential health and safety hazards associated with construction activities, closure of FR 182, including all existing signage, will remain in effect during construction.

Transportation

To minimize transportation impacts on safety, noise, and increased traffic from construction vehicles, the following design criteria will be required:

- Construction vehicles hauling material on FR 182 will be limited to 25 mph to minimize dust and facilitate safety.
- Construction vehicles hauling material on State and local roads will be limited to posted speed limits to facilitate safety.
- The County will institute a public information plan to inform citizens of construction traffic. Additionally, the County will require the construction contractor to develop a traffic safety plan that would be approved by the New Mexico Department of Transportation. The plan would detail the use and location any warning signs, flaggers, or traffic monitors that would be necessary to mitigate any adverse impacts on safety from construction vehicles.

Wildlife

The following mitigation measures will be used to reduce disturbance in suitable habitat area for wildlife during the breeding season.

- To avoid and minimize impacts to nesting birds, the County would limit tree removal outside of the dates of March 1 to July 31 each year. Surveys to document nest occupancy shall be conducted by a professional biologist prior to any tree removal within the period of March 1 to July 31. All results of the nest occupancy survey shall be submitted in writing to the Forest Service District Biologist and approved by the Forest Service prior to tree removal activities.
- Prohibiting the use of engine brakes or compression release engine brakes (also known as *Jake Brakes* or *Jacobs Brakes*) on construction vehicles from the intersection of Diamond Drive and West Road to the facility will mitigate any noise disturbance to roosting vultures or birds.
- If a turkey vulture nest were found during operations, the district biologist would be consulted for mitigation measures to avoid disturbance.
- To avoid and minimize impacts to the Jemez Mountain Salamander, the County will coordinate with the Forest Service District Biologist prior to any construction activities that occur from July 1 to September 15 of each year. Based on the District Biologist's assessment of potential salamander habitat, a surface survey of any areas with new ground disturbance would be conducted for the Jemez Mountain Salamander. Any species found during the survey would be removed prior to construction activities.
- Minimizing the trapping of wildlife during trenching operations, where possible, by trenching and burying pipeline or drainage culverts concurrently, leaving the least possible amount of trench open overnight, and providing escape ramps for trapped wildlife at a slope of 3V:1H.
- Appropriate design criteria for T&E wildlife species, if any, would be determined in consultation with the U.S. Fish and Wildlife Service.

Heritage Resources

The objective is to protect heritage resources (archaeological sites) from direct or indirect impacts caused by ground disturbing activities associated with the project.

- If any unrecorded sites are discovered during the course of project implementation, all project activities in the vicinity of the site(s) will cease and the District or Forest Archaeologist will be notified.

Vegetation

- Disturbed areas outside the normal high water mark for the stream and reservoir, and roadways will be replanted and/or reseeded with an appropriate, weed-free mix of native plants typically found in Los Alamos Canyon.

Water and Soils

The following measures will be used to minimize adverse impacts to water and soils from construction activities:

- Erosion control barriers consisting of certified weed-free straw bales, straw wattles, and/or silt fencing will be constructed as needed during construction to prevent soil loss from occurring.
- No new access roads or staging areas will be necessary for this project, thereby minimizing the impacts to soil and water by eliminating the need to expand the project footprint.
- As defined in the Forest Plan, best management practices recommended by the State of New Mexico, the U.S. Environmental Protection Agency, and the Forest Service would be used to protect water quality from non-point source pollution. The County will obtain any necessary permits for construction activities, including a National Pollutant Discharge Elimination System permit and a Section 404 permit, if necessary.

Recreation

- The down-stream slope of the facility would be seeded with native grasses to provide a natural cap in place of a concrete cap. This natural cap would provide a more natural setting and enhance the recreational experience at the facility.