

DRAFT ENVIRONMENTAL ASSESSMENT

VALLECITO DAM ROAD RELOCATION

October 1, 2004

Prepared by the Bureau of Reclamation  
Western Colorado Area Office  
Grand Junction and Durango, Colorado

## INTRODUCTION

### Purpose and Need

This draft environmental assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190) to evaluate the effects of relocating the Vallecito Dam Road, also described as Forest Service Road FDR 603.

Vallecito Dam and Reservoir were constructed in 1941 and are located in La Plata County, Colorado on the Pine River. At that time, access around the reservoir was provided by constructing a road along the crest of the dam. Over time, this road ceased to meet the needs of the operators of the dam, Pine River Irrigation District (PRID); the public; and local, state and federal governments. The need for relocating the Vallecito Dam Road is primarily due to concerns for public safety and security. For example, the existing road (bridge) has a limited weight capacity of 11 to 40 tons gross weight, depending on the type of vehicle. This weight capacity limits the use of the road by many trucks and emergency vehicles. Also, the road across the dam is narrow and there are no guard rails making it somewhat unsafe to cross. Although it is an asphalt road, yearly maintenance of the road is costly. Last, new concerns about keeping federal facilities safer from possible terrorist attacks have resulted in the Bureau of Reclamation (Reclamation) restricting access to its dams. Relocating this road would also help achieve this need.

### Background

During the early 1990s, the US Forest Service (USFS) initiated planning for recreation improvements at Vallecito Reservoir; significant public involvement was part of the process. In April 1994, the USFS completed a final EA and published a Decision Notice and Finding of No Significant Impact (FONSI) (USFS, 1994.) The decision notice included reconstruction of FDR 603 to provide for user safety by relocating the access road below the dam and constructing a new two-lane standard load capacity bridge and paving the entire length of the road to Pine Point Campground. The decision notice also required the USFS to obtain necessary approvals from and agreements with Reclamation and PRID to relocate and construct the road and bridge below the dam; reconstruct any portion of FDR 603 on Reclamation lands; maintain these facilities in the future; and assist Reclamation in environmental analysis of relocation and construction.

During the early to mid-1990s, Reclamation prepared a Resource Management Plan (RMP) for Vallecito Reservoir (USBR, 1994.) The RMP and associated final EA and Finding of No Significant Impact (FONSI) were completed in January 1995 and September 1996, respectively. As related to relocation of the road and bridge, the RMP acknowledges the above-mentioned USFS decision notice for the Vallecito Recreation Enhancement Project.

Design for relocation of the road and bridge was not initiated by the USFS until 1997 due to funding constraints. The initial design located the road and bridge at the toe of the dam, above the outlet works, but work was further postponed due to funding constraints. In August 2003, the USFS contacted Reclamation stating they might receive approximately \$2,000,000 from the Federal Highways Transportation Fund in 2003 and 2004 that could be applied to relocating the road. Also during the same time period, due to increased security concerns, Reclamation determined that relocation of the road off the dam would improve facility security.

In 2003 Reclamation renewed planning and NEPA compliance for the road relocation. A public scoping meeting was held to discuss the proposed relocation of the Vallecito Dam road on May 12, 2004 at the Vallecito Community Church initiating the formal NEPA process.

## DESCRIPTION OF THE ALTERNATIVES

During August and September 2003, Reclamation, PRID and the USFS considered four relocation alternatives based on Reclamation's safety and security concerns and PRID's operation and maintenance issues.

Alternatives considered in this analysis are depicted on the figures presented later in this report. They are:

Alternative 1: Close the road across the dam and improve the existing access on County Road 501 to the north and east around the reservoir, including a new bridge across the Pine River near Five Branches Resort on the east side of the reservoir. This alternative would include obtaining a wider easement in the Five Branches area. The landowner is not a willing seller and, therefore, the easement might not be obtainable in a timely manner. This alternative is shown in Figure 1. Estimated cost of this alternative is about \$9,000,000.

Alternative 2: Close the road across the dam and construct a new road and bridge on private land below the dam, adjacent to Reclamation's Primary Jurisdiction Area (PJA) near the powerplant. The road would continue east across the Pine River to USFS land, then north on the east side of the river to the east side of the PJA, then connect with FDR 603 on the east side of the reservoir. This alternative would include obtaining an easement; however, the landowner is not a willing seller and the easement may not be obtainable in a timely manner. This alternative is described in Figure 2 below. Estimated cost of this alternative is about \$4,000,000.

Alternative 3: Close the road across the dam and construct a new road and bridge on private land below the dam, downstream or south of Alternative 2. The road would continue east across the Pine River to USFS land, then north on the east side of the river to the east side of the PJA, then connect with FDR 603 on the east side of the reservoir. This alternative would include obtaining an easement; however, the landowner is not a

willing seller. This alternative is described in Figure 3 below. Estimated cost of this alternative is about \$14,000,000.

Alternative 4 (Proposed Alternative): Close the road across the dam and construct a new road and bridge in the PJA below the dam just above the spillway stilling basin, as compared to the above-mentioned design in 1997 which relocated the road and bridge at the toe of the dam above the outlet works. The road would continue east across the spillway to the east side of the PJA, then north to connect with FDR 603 on the east side of the reservoir. This alternative would not require acquisition of private land. There would be a major cut in the vicinity of the spillway and major fill area near the center of the road at the toe drain location. It is unlikely that any fill material would be brought in. Estimated cost of this alternative is about \$2,000,000.

Under the proposed alternative, the proposed road would be approximately 4,300 feet in length and have a right-of-way 75 feet wide. The proposed road would consist of a double lanes, with each lane 11 feet in width with a 6" bituminous asphalt layer on top of a 6" compacted base course material. The shoulders would be 4-feet wide and would consist of a gravel road base material. The grade of the road would not exceed 8 percent and the road would have a design speed of 30 mph. The bridge would meet state highway standards, single axle load limits of approximately 40 tons.

There would be a parking area/turnaround at the east end of the road. A 4-strand barbed wire fence would be located adjacent to the road and would be signed to keep vehicular traffic and the general public out of the area below the dam. Security fencing would be placed at strategic locations near the bridge/spillway interface, the outlet works area and the powerplant area. Several gated turnouts would be provided along the new section of the road to allow for access as deemed necessary by Reclamation and PRID. These turnouts/access points would be gated and locked and would not allow unauthorized vehicle traffic to areas below the dam.

The existing dam road would remain open to pedestrian and bicycle traffic. Security issues could cause temporary or permanent closures as needed. The road would be closed to public vehicle traffic. The proposed alternative is described in Figure 4 below. Also, Figure 5 represents an artist's concept of what the construction of Alternative 4 would entail.

Alternative 5: (No Action Alternative) Continue to allow the general use of the existing road across Vallecito Dam. Implementing Alternative 5 would result in allowing the public free access to and across Vallecito Dam. Only the proposed alternative and the No Action Alternative are analyzed in depth in this EA.



Figure 1. Alternative 1. Vallecito Dam road would be closed and improvements would be made to County Road 501 to the north and east around Vallecito Reservoir.



Figure 2. Alternative 2. Close the road across the dam and construct a new road and bridge on private land below the dam.



Figure 3. Alternative 3. Close the road across the dam and construct a new road and bridge on private land below the dam south of Alternative 2.

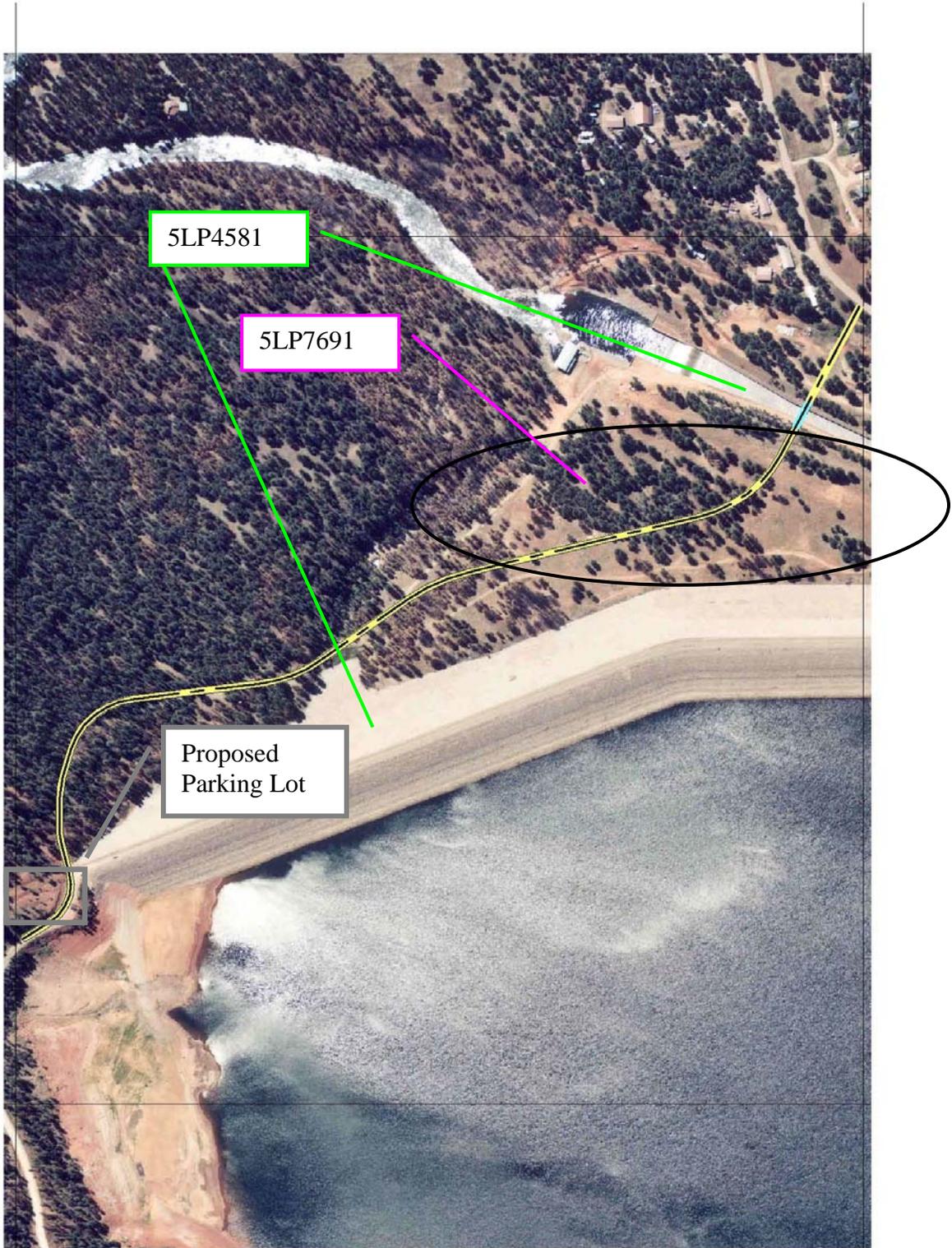


Figure 4. Alternative 4. Close the road across the dam and construct a new road and bridge in the PJA below the dam just above the spillway stilling basin. Cultural resource sites discussed in text are shown.

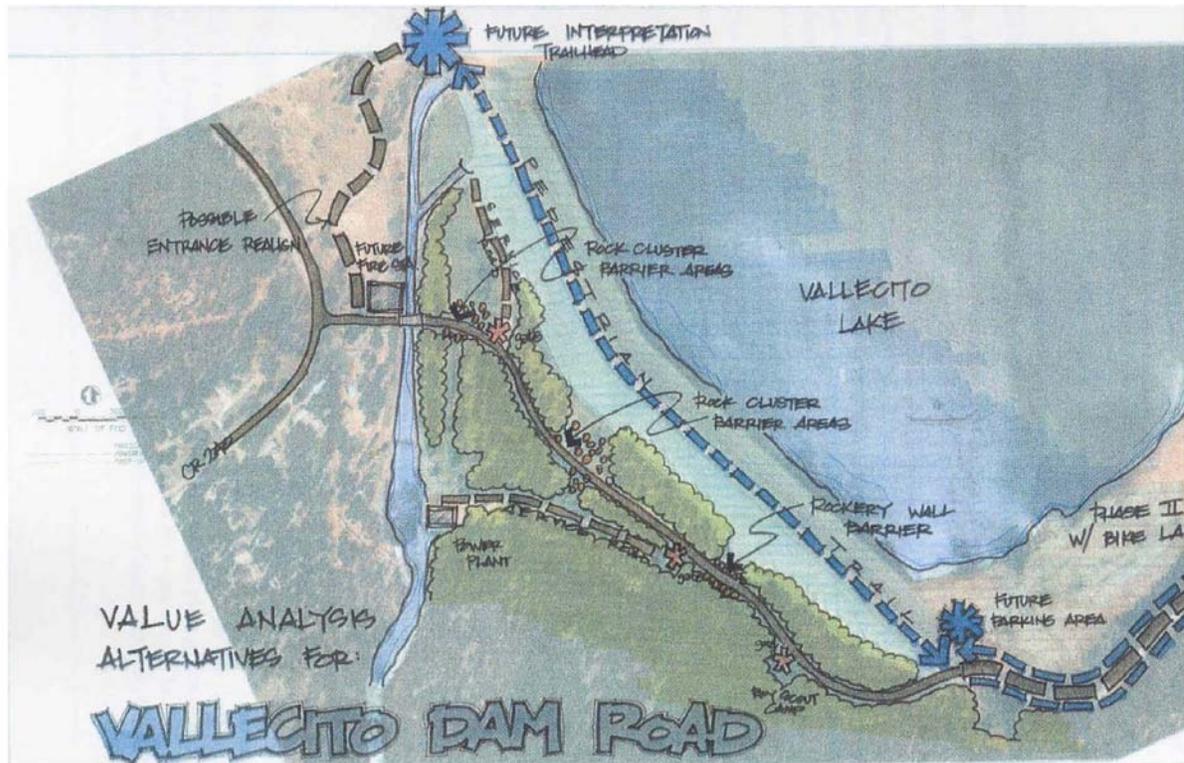


Figure 5. Artist conception, Proposed Alternative also showing the existing Vallecito Dam Road as a trail.

## EXISTING ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

### Introduction

For purposes of impact analysis, the project area includes Vallecito Dam and areas potentially impacted through the relocation of the Vallecito Dam Road as described under Description of Alternatives. Alternatives 1, 2, and 3 were rejected for a variety of reasons including cost, lack of a willing land sellers and generally higher environmental impacts due to longer road relocation distances.

### Resources and Impacts

#### Vegetation

Under Alternative number 4, the Proposed Alternative, the Vallecito Dam road would result in the loss of some vegetation below the dam. The overstory that would be affected is characterized by numerous 150+ year old ponderosa pine trees and scattered spruce/fir and aspen. Many of these trees were severely damaged by the 2002 Missionary Ridge fire and will be removed due to their close proximity to the existing operations and

maintenance road. In the early spring of 2004, several trees that had been burned in the 2002 fire were removed along the existing operations and maintenance road as part of a hazard tree removal project. Numerous other hazard trees within this general area will also be removed later in 2004.

In addition, approximately another 100 healthy trees would need to be removed associated with road construction. There exists very little vegetation within the understory. This is most likely attributable to the effects of the Missionary Ridge fire which burned through the area destroying most of the brushy understory. Various species of forbs and grasses have become established on the valley floor over the last two years.

### Wildlife

No specific wildlife surveys were conducted associated with the proposed action. Based on anecdotal accounts and other state and federal agency's biological evaluations, Reclamation concluded that sufficient information was available from which to assess the effects of construction and operation of the proposed new road on wildlife resources. Direct short and long-term adverse impacts to the existing wildlife habitat associated with vegetation removal and ground disturbance could affect a variety of birds including sensitive species such as the Lewis' woodpecker, northern goshawk, olive-sided flycatcher, hairy woodpecker and the pygmy nuthatch; one reptile, the milk snake; and two mammals, the Townsend's big-eared bat and the dwarf shrew. Due to the relatively short road relocation – less than one mile – impacts to these wildlife species is expected to be minimal. There would also be minor adverse impacts to bear, mule deer and elk habitat.

### Endangered Species

Only one federally protected species, the bald eagle, listed as threatened under the Endangered Species Act, seasonally occurs within the general area. It is a fall/winter resident and more closely associated with inlet areas of Vallecito Reservoir. When the reservoir is open in the fall and early winter, eagles are often seen feeding on fish from the reservoir, mostly kokanee and trout. Once the lake freezes over, bald eagles generally move to lower elevations where they feed primarily on carrion. They are not known to nest in the Vallecito Reservoir vicinity. Construction and operation of the proposed new road would not affect the bald eagle. There is no potential to affect other endangered or threatened species.

### Wetlands

A small wetland located below the dam associated with a dam seep would be impacted by the road construction. Impacts to this wetland would be kept to a minimum and the U.S. Army Corps of Engineers Regulatory Office (COE) would be consulted to address compliance with the Section 404 of the Clean Water Act. In addition, the bridge constructed to cross Vallecito Dam's spillway could require similar consultation with the COE.

## Recreation

Currently, access on Reclamation lands below the dam is limited. Accordingly, very little recreational use occurs in this area with one notable exception. A boy scout troop has historically been allowed to camp within this area during the summertime. Relocating the road in this area would have some negative impact to this type of camping due to increased noise and sight disturbance but it would not prevent the boy scouts from using the general area in which to continue summer camping.

## Cultural Resources

A background search of known archeological remains at Vallecito Reservoir reveals that both prehistoric and historic period sites exist at the reservoir. Most of the historic sites date to the Vallecito Dam construction period, but earlier times are also represented. Among the former is Vallecito Dam Construction Camp (site number 5LP4580) and Vallecito Dam (5LP4581), both of which have been determined eligible for the National Register of Historic Places (Register). In order to comply with the National Historic Preservation Act (NHPA), Reclamation is consulting with the Colorado Historic Preservation Office (SHPO) and other interested parties on the significance of any new sites and the potential effects of the road relocation on the dam and any other historic properties.

Most of the area of potential effect (APE) for the proposed alternative was inventoried for cultural resources (Hatch 1997) as part of the early planning process for the road. That survey did not record a large historic site which is present between the dam and the spillway. This site (5LP7691) is being fully documented and evaluated for its significance. The site contains at least 28 historic features associated with construction and use of Vallecito Dam and 17 additional loci of activities which are associated with the construction of Vallecito Dam. Some of these features may contribute to the significance of the site while others do not. The site also contains two culturally-peeled trees (evidence of Native American use of these ponderosa pine trees). Since the site occurs within the APE for the Proposed Alternative road corridor (see Figure 4) it will be important to determine how the project will affect the site, if at all. A report documenting the new inventory area and the details of Site 5LP7691 is in preparation. This report will serve as the basis for Reclamation to consult with the Colorado SHPO and determine if Site 5LP7691 meets the criteria for eligibility to the Register, and if the proposed undertaking will have an effect on significant properties. These findings will be reported in the final environmental assessment.

One other site, Vallecito Dam (5LP4581), also may be affected by the proposed road relocation. Specifically, the spillway of the dam is crossed by the proposed route of FDR 603. Reclamation does not believe that the road project will affect the qualities of integrity or any other criteria which make Vallecito Dam eligible for the National Register. The Colorado SHPO is being consulted to confirm this.

In the event that ground disturbances exceed the corridor currently identified as the right-

of-way, this additional area would be subject to compliance under the NHPA and other Federal statutes. For example, among other earth-modifying items which have not been identified are: borrow sources, drainage ditches, temporary construction accesses, and other potential locations of ground disturbance. Some of these items would be planned prior to the project; others would be identified once construction is underway.

Avoidance of significant cultural resources is the preferred treatment measure. However, if it is necessary to treat historic properties through other means (e.g., data recording or excavation), Reclamation will consult with appropriate agencies and interested parties and implement the approved treatment program as required by existing federal law.

## ENVIRONMENTAL COMMITMENTS

The following stipulations will be abided by during construction of the road to avoid or minimize any environmental impacts of the proposal.

- During construction of the road best management practices (BMP's) would be implemented to reduce negative environmental impacts. Examples of BMP's would be minimizing erosion, dust abatement, general pollution control, minimizing vegetation disturbance, noise abatement, and management of fuels. Also, areas that are incidentally impacted due to construction activities that are not part of the constructed road will be restored and revegetated with native seed. This commitment will be implemented by the USFS.
- Comply with the Migratory Bird Treaty Act.
- The USFS and Reclamation will comply with any requirements associated with consultation with the COE under Section 404 of the Clean Water Act.
- An environmental construction checklist will be prepared by the USFS for all construction activities listing more specific environmental safeguards.
- Reclamation and the USFS commit to complying with the National Historic Preservation Act (NHPA) and its regulations (36 CFR Part 800). They will also comply with USFS and Reclamation policies and with all other applicable laws pertaining to prehistoric and historic period cultural resources. This will require determination of significance for Site 5LP7691, and determinations of the effect of the undertaking on both Sites 5LP7691 and 5LP4581. When newly identified areas of potential effect are identified (e.g., materials sources or cut and fill outside the right-of-way), Reclamation and/or USFS cultural resources staff will locate, identify, record and evaluate cultural resources within these areas. Reclamation and USFS will implement all cultural resources treatment programs as determined by the consultation process required in 36 CFR Part 800. If previously unknown or subsurface cultural resources are encountered during ground disturbing activities, the operations will immediately cease in the vicinity

of these remains and a Reclamation Archeologist will be notified.

- Until the newly constructed road is opened to general traffic, the existing dam road will remain open to general traffic.

## CONSULTATION AND COORDINATION

A public scoping meeting was held to discuss this proposal on May 12, 2004. Also, several informal meetings were held between government agencies, the Southern Ute Tribe, the Bureau of Indian affairs, PRID, and local residents. Reclamation issued a News Release announcing its intentions to prepare an environmental assessment addressing the dam road relocation that was published in the Pine River Times on May 6, 2004. Also, input was obtained from the USFS, the Colorado Division of Wildlife and the U.S. Fish and Wildlife Service. Reclamation and the USFS are committed to future consultation under the NHPA and the Colorado State Historic Preservation Officer and other interested parties.

## SUMMARY

As stated above, Reclamation has selected Alternative 4 as its proposed alternative in order to relocate the Vallecito Dam Road to a more preferred location. This alternative has the least amount of environmental impacts, is the most cost-effective action alternative and best meets the stated purpose and need.

In summary, abandoning the Vallecito Dam Road and relocating it below the dam as described under alternative 4, is not expected to result in significant impacts to the human environment.

## LITERATURE CITED

Hatch, S.K. 1997. *East Vallecito Road Relocation Heritage Resources Intensive Inventory: Project Description and Determination of Effect on the Vallecito Dam, 5LP4581, La Plata County, Colorado*. Cultural Resources Report Number 13-931. Unpublished report prepared by the USDA, San Juan National Forest Columbine Ranger District, Durango.

U.S. Forest Service. 1994. *Vallecito Recreation Enhancement Project. Environmental Assessment and Decision Notice and Finding of No Significant Impact*. Pine Ranger District, San Juan National Forest, La Plata County, CO.

U.S. Bureau of Reclamation. 1994. *Vallecito Reservoir Resource Management Plan*. . Upper Colorado Region, Durango Projects Office, Durango, CO.

