



United States  
Department of  
Agriculture

Forest  
Service

May 2015

# Environmental Assessment

## Beaver Park Reservoir Additional Inundation

Divide Ranger District, Rio Grande National Forest

Rio Grande County, Colorado

Township 39N, Range 3E, Section 34, NMPM



For Information Contact: [Martha Williamson](#)

13308 W Highway 160, Del Norte CO 81132

719.657.3321

<http://www.fs.usda.gov/main/riogrande>.

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# Table of Contents

## Contents

<b>Introduction.....</b>	<b>4</b>
Purpose and Need for Action.....	4
Proposed Action.....	5
Issues.....	5
<b>Proposed Action.....</b>	<b>6</b>
Project Design Criteria .....	7
<b>Environmental Consequences.....</b>	<b>7</b>
Project Effects .....	7
Public Health or Safety.....	9
Unique Characteristics of the Geographic Area .....	9
Quality of the Human Environment.....	9
Uncertainty .....	9
Precedent for Future Actions.....	9
Cumulative Effects .....	10
Cultural Resources .....	10
Threatened, Endangered, and Sensitive Species.....	10
Federal, State, or Local Laws .....	11
<b>Consultation and Coordination .....</b>	<b>12</b>
<b>References .....</b>	<b>14</b>
<b>Appendix A: Response to Comments .....</b>	<b>15</b>

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# INTRODUCTION

## Purpose and Need for Action

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The purpose of this analysis is to review an application submitted by Colorado Parks and Wildlife (CPW) for a special use authorization to inundate 17.52 acres of National Forest System (NFS) lands at the south end of Beaver Park Reservoir in Rio Grande County, Colorado. This authorization is needed because CPW is not authorized to occupy the NFS lands needed to store water up to its full decreed capacity at this reservoir.

Past storage in Beaver Park Reservoir has inundated the subject 17+ acres of NFS lands. A 2010 inspection by the State Dam Engineer documented a sink hole at the dam's abutment and put the reservoir under storage restriction. During the process of authorizing the dam reconstruction work, a discrepancy between the CPW easement and its maximum high water line was identified, identifying the need for an additional authorization for water storage at the site.

Beaver Park Reservoir was originally constructed in 1912 and was authorized by an easement issued by the General Land Office (GLO) to Mosca Irrigation District under the Act of 1891 in 1916. The reservoir was purchased from the Mosca Irrigation District by CPW in 1965. The easement is defined by the boundary recorded by the GLO, a dam height of 95 feet, a maximum high water line depth of 85 feet and a storage water capacity of 4,434 acre feet.

The initial water right decree was filed in 1916, with an amendment for an additional amount of 324.4 acre feet filed in 1960. CPW's easement, transferred from the Mosca Irrigation District, authorizes CPW inundation of NFS land up to the 1916 decree. The additional storage by the 1960 amendment exceeds what was authorized by the easement. There is no mechanism or authority to adjust the easement boundary (as authorized under the Act of 1891) so an alternative means of authorizing the occupancy and use of NFS lands is necessary.

This action responds to the goals and objectives outlined in the Rio Grande National Revised Land and Resource Management Plan as amended (Forest Plan, 2003), and helps move the project area towards desired conditions described in that plan:

*Forest managers cooperate with local, county, state, and American Indian partners to meet rural-community needs. Forest managers strive to improve rural conditions by helping to solve local problems in ways that enhance environmental quality according to existing authorities and law. (Forest Plan, I-4)*

Accommodating CPW's request for authorization to store water up to their full decreed amount will allow continued administration of Rio Grande Compact water.

## Proposed Action

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The Forest Service proposes to issue a special use permit to CPW for the inundation of 17.52 acres of National Forest System lands at the south end of Beaver Park Reservoir.

## Issues

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Appendix A summarizes the comments received during scoping. The Forest Service identified five issues raised during scoping:

**Issue #1: Impacts to private land.** The proposed action will result in the unauthorized inundation of private land south of Beaver Park Reservoir.

**Issue #2: Road flooding.** The proposed action will result in permanent or intermittent flooding of Beaver Park road (FSR 360).

**Issue #3: Impacts to a quality stream fishery.** The proposed action will result in the loss of a quality stream fishery.

**Issue #4: Impacts to recreation.** The proposed action will displace anglers interested in stream fishing, including fishing guides, and will create the need to relocate the boat ramp pit toilet.

**Issue #5: Adverse effects to prehistoric cultural sites.** The proposed action will adversely affect prehistoric cultural sites.

# PROPOSED ACTION

The proposed action is to issue a special use permit to CPW for the inundation of 17.52 acres of NFS lands at the south end of Beaver Park Reservoir. Figure 2 illustrates the footprint of the additional inundation.

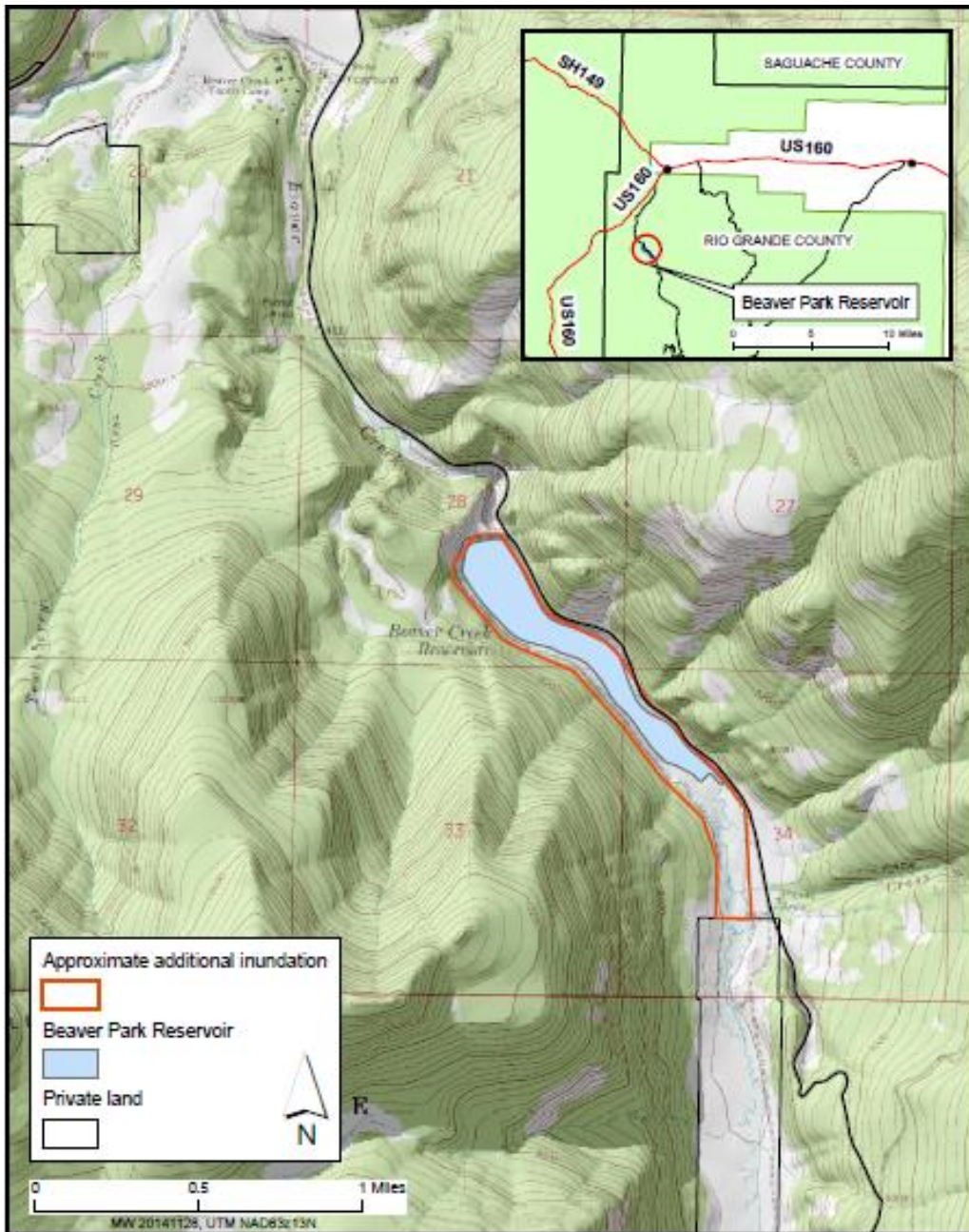


Figure 2. Beaver Park Reservoir proposed additional inundation.

## Project Design Feature \_\_\_\_\_

Table 1 summarizes the project design feature (PDF):

Criterion	Rationale
CPW will demonstrate a legal right to inundate private lands before the Forest Service issues a special use permit	Addresses Issue #1

**Table 1. Project design feature**

# ENVIRONMENTAL CONSEQUENCES

## Project Effects

Effects to the resources identified during scoping (private land, the road, fisheries, recreation, and cultural resources) are discussed in this section. Resource specialists on the Interdisciplinary Team (IDT) determined that the proposed action will have no effect on wildlife, plants, range management, soils, hydrology, or silviculture. Reports documenting these determinations are available in the project record.

### No action

The no-action alternative would maintain the existing condition in all resource areas except NFS land occupancy. The primary effect of the no-action alternative on NFS land occupancy is that no special use permit would be issued and CPW would not be permitted to store water in Beaver Creek Reservoir up to its decreed capacity.

### Proposed Action

#### **Impacts to private land**

CPW has applied for a special use permit to inundate 17.52 acres of NFS lands. This surface area corresponds to a maximum high water line elevation of approximately 8807'. Water stored up to this elevation would inundate private lands in the southeast quarter of the southwest quarter of Section 34.

The Forest Service would not issue a special use permit for inundation of 17.52 acres of NFS lands until CPW can demonstrate that it has a legal right to inundate the private lands as well. This is included in the project design feature.

#### **Road**

The elevation of the maximum high water line that would be authorized under the proposed action is 8807'. The Forest Service confirmed the road's elevation with a handheld GPS in the spring of 2015. Beaver Park Road, FSR 360, sits at a minimum elevation of 8829' as it parallels the reservoir between the dam and Cross Creek

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campground. CPW would control releases from the Beaver Park dam to mitigate any concerns for flooding.

### **Fisheries**

CPW manages Beaver Park Reservoir as a recreational sport fishery and stocks it with rainbow trout and kokanee salmon.

The stretch of Beaver Creek from the private property line in Section 34 to the head of the reservoir is less than a half-mile and is considered low quality stream fishery habitat. This stretch of stream is not optimal fish habitat due to the lack of cover, little or no bank overhang, and the historic inundation that took place prior to 2010. There are many higher quality streams nearby, including the lower portion of Beaver Creek, the South Fork of the Rio Grande, Pass Creek, and Park Creek, as well as the portion of Beaver Creek above the private property. These creeks offer miles of stream, and are higher quality stream fisheries. The proposed action is not anticipated to have any effect on the Beaver Creek fishery.

### **Recreation**

#### Angling:

Under the proposed action, the section of Beaver Creek between the private land and the reservoir would remain fishable through most of the summer. Typically, this stretch of Beaver Creek is at its longest in late October and early November, before storage season begins. As the storage season ends at the end of March, the reservoir should reach capacity and the length of Beaver Creek would be at its shortest, and remain that way until the spring runoff ceases in late May to early June. As water is drawn down in the reservoir due to irrigation demands, the length of the stream increases and becomes fishable again.

The main demand on this stretch is typically from the kokanee fishermen taking advantage of the fall snagging season which starts in October and runs through the end of December. Since this stretch of stream is not high quality habitat, of short length, the stream fishing pressure is very light and no displacement of anglers to other streams is anticipated.

There is one fishing guide permitted on this stretch of Beaver Creek. There would be no change to the guide's permitted area as a result of the proposed action.

#### Vault toilet:

The linear distance from the vault toilet to the proposed high water line is 30 feet. The toilet would therefore continue to meet the setback requirement of 25 linear feet established by the Colorado Department of Public Health and Environment regulations (6 Code of Colorado Regulations 1010-9 14.1.b).



## **Public Health or Safety**

As mentioned in the recreation effects discussion above, the pit toilet at the boat ramp would continue to meet State setback requirements under the proposed action.

The proposed action is not anticipated to have any effects on public health or safety.

## **Unique Characteristics of the Geographic Area**

Beaver Park Reservoir has been a water impoundment since 1912. The area adjacent to the proposed inundation hosts an active grazing allotment, a campground, a boat ramp, and dam reconstruction work.

There are no historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas in the area proposed for inundation.

## **Quality of the Human Environment**

There are no effects on the quality of the human environment likely to be highly controversial.

The Project Effects section discusses Issue #1 and the potential impacts to private land. The proposed action as implemented with the design feature would not result in unauthorized inundation of private land.

The proposed action would result in Beaver Park Reservoir storing its full decreed capacity. This would allow CPW greater flexibility in managing the water in this reservoir and in meeting Rio Grande Compact requirements.

## **Uncertainty**

CPW has provided a risk assessment as part of the special use permit application and the overall risk rating for the additional inundation is low. The proposed action would not have any highly uncertain effects on the human environment nor any that involve unique or unknown risks. Resource specialist reports and the risk assessment are available in the project record.

## **Precedent for Future Actions**

Federal regulations (36 CFR 251.50) require entities to obtain a special use authorization prior to conducting any use of NFS lands. This action follows this regulatory direction and does not set precedent for future actions.

A boat ramp, pit toilet, picnic area and campground all currently sit at the south end of the reservoir. It is highly unlikely that authorizing the additional inundation would lead to requests for additional recreation infrastructure.

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## Cumulative Effects

Two projects overlap with the Beaver Park Reservoir additional inundation project in both space and time: the Beaver dam reconstruction project and the Poage Lake spruce beetle salvage project.

The Beaver dam reconstruction project is intended to repair a sink hole identified by the state dam engineer. In 2010, the State Engineer's Office documented a sink hole near the dam's downstream left abutment, and put the reservoir under a storage restriction. From 2010 to 2014, the reservoir remained under this restriction, and was kept approximately half full. In May of 2014, the reservoir was drained and construction activities began to repair the dam in order to restore its full capacity. The construction activities are expected to be completed by July 2015. The completed dam reconstruction triggers the need for the special use permit to inundate additional NFS lands.

The Poage Lake spruce beetle salvage project is expected to have a final decision notice by September 2015. Should that project be implemented as proposed, Poage Lake would be closed to recreational fishing for a short amount of time to allow for hazard tree removal. During that time, it would be expected that Beaver Park Reservoir, in particular the area adjacent to the boat ramp where the additional inundation would occur, would see additional fishing pressure from anglers temporarily displaced from Poage Lake.

No other past, current, or reasonably foreseeable future projects overlap with the proposed action.

## Cultural Resources

The Area of Potential Effect (APE) for cultural resources includes 10 acres at the inlet with high potential for cultural resources but that has been inundated in the past. The remaining 7.52 acres sit around the edges of the reservoir and are determined to be too steep for cultural resource inventory. In October of 2014, Rio Grande National Forest Service archaeologists conducted a Class II cultural resource inventory for the project, surveying 10 acres and documenting one site. Site 5RN1296 is a multicomponent site containing a prehistoric open camp and an abandoned historic road segment. The site was subsequently shovel tested for buried cultural deposits which were negative. Therefore, 5RN1296 is recommended as not eligible to the National Register for Historic Places (NRHP) and the recommended determination for this undertaking is *no historic properties affected*. The Colorado State Historic Preservation Office concurred with this determination on May 12, 2015.

## Threatened, Endangered, and Sensitive Species

The proposed action would not affect any threatened, endangered, or sensitive plant or animal species. The biological assessment and evaluation are available in the project record.

## **Federal, State, or Local Laws**

Applicable federal, state, and local laws include: Native American Graves Protection and Repatriation Act, the National Historical Preservation Act and the Forest Plan.

### Native American Graves Protection and Repatriation Act (NAGPRA):

NAGPRA outlines procedures to follow in the event of the intentional excavation and accidental discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony. These procedures include provisions for consultation and custody. The proposed action includes a PDC that ensures compliance with NAGPRA.

### National Historical Preservation Act (NHPA):

The “Cultural Resources” section above describes compliance with NHPA.

### Rio Grande National Forest Revised Land and Resource Management Plan:

The proposed additional inundation would occupy lands in the Dispersed Recreation Management Area Prescription (MAP). Emphasis in this MAP is on relatively easy access to a water feature or other natural attraction where activities may occur year round (Forest Plan, IV-21). The proposed action is consistent with direction for that MAP.

As stated in the background section, the proposed action would move the Rio Grande National Forest towards its desired condition for cooperation with state partners to meet rural community needs. In addition, the proposed action would meet the Forest-objective to do the same (Forest Plan, Forest-wide objectives, II-5).

## CONSULTATION AND COORDINATION

The Forest Service consulted the following individuals, Federal, State, and local agencies, tribes and non-Forest Service persons during the development of this environmental assessment:

**ID TEAM MEMBERS:**

Agency	Name	Position
Rio Grande National Forest	Martha Williamson	IDT Leader, Line Officer
	Dale Gomez	Wildlife & TES
	Joseph Old Elk	Hydrology
	Vaughn Thacker	Soils
	Tristram Post	Range Management & Invasive Species, Plants
	Jody Fairchild	Recreation (secondary)
	Angie Krall	Archeology
	Barry Wiley	Fisheries (secondary)
Colorado Parks and Wildlife	Jeremy Gallegos	Recreation (primary)
	Tony Aloia	Fisheries (primary)

**FEDERAL, STATE, AND LOCAL AGENCIES:**

Colorado Parks and Wildlife

Rio Grande County Commissioners

**TRIBES:**

Southern Ute Indian Tribe	The Hopi Tribe
Jicarilla Apache Tribe	Uintah and Ouray/Northern Ute Tribe
Ute Mountain Ute Tribe	Pueblo of Santa Ana
Pueblo of Nambe	Pueblo of Santo Domingo

San Ildefonso Pueblo	Ohkay Owingeh (Pueblo of San Juan)
Pueblo de Cochiti	Santa Clara Pueblo
Pueblo of Picuris	Taos Pueblo
Pueblo of Zuni	Pueblo of Laguna
Pueblo of Acoma	

**OTHERS:**

<b>Organizations</b>	<b>Rio Grande National Forest Permittees</b>	<b>Individuals</b>
San Luis Valley Ecosystem Council	Fawcett Land & Cattle	Barry Beal, High Valley Ranch
Trout Unlimited	Loren & Shauna Mortensen	
Carson Forest Watch	Arrow Cattle (Wes Ensz)	
Rocky Mountain Wild		
Rio Grande Watershed Emergency Action and Coordination Team (RWEACT)		
Timberline LLC		
Rio Grande Anglers		

## REFERENCES

Code of Colorado Regulations. 6 CCR 1010-9. Available online:

<http://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=410&fileName=6CCR1010-9>

Code of Federal Regulations. 36 CFR 251.50. Available online: [http://www.ecfr.gov/cgi-](http://www.ecfr.gov/cgi-bin/text-idx?SID=b33a47ed2525e34f26e14a408f62ad81&mc=true&node=pt36.2.251&rgn=div5#sp36.2.251.b)

[bin/text-](http://www.ecfr.gov/cgi-bin/text-idx?SID=b33a47ed2525e34f26e14a408f62ad81&mc=true&node=pt36.2.251&rgn=div5#sp36.2.251.b)

[idx?SID=b33a47ed2525e34f26e14a408f62ad81&mc=true&node=pt36.2.251&rgn=div5#](http://www.ecfr.gov/cgi-bin/text-idx?SID=b33a47ed2525e34f26e14a408f62ad81&mc=true&node=pt36.2.251&rgn=div5#sp36.2.251.b)

[sp36.2.251.b](http://www.ecfr.gov/cgi-bin/text-idx?SID=b33a47ed2525e34f26e14a408f62ad81&mc=true&node=pt36.2.251&rgn=div5#sp36.2.251.b)

Rio Grande National Forest Revised Land and Resource Management Plan (Forest Plan). 1996 and 2003. Rio Grande National Forest. Available online:

<http://www.fs.usda.gov/main/riogrande/landmanagement/planning>.

## APPENDIX A: RESPONSE TO COMMENTS

Commenter	Comment	Forest Service response
High Valley Ranch (HVR)	Neither HVR nor its predecessors-in-title have ever granted CPW and easement to inundate the HVR property.	A special use permit to inundate NFS lands outside the existing easement will only be issued once there is documentation that CPW has a legal right to inundate HVR lands as well.
	There is no basis for the USFS to grant CPW’s request to modify the USFS Easement to include the HVR Property	The proposed action is to issue CPW a special use permit to inundate 17.52 acres of NFS land that lie outside the easement boundary.
	There is no support for CPW’s argument that the 1914 Survey is in error, that the USFS Easement should be “administered” to provide for an 85 foot fill level, or that CPW should be authorized to take and inundate new private and public land.	<p>The proposed action is to issue CPW a special use permit to inundate 17.52 acres of NFS land that lie outside the easement boundary.</p> <p>A special use permit to inundate NFS lands outside the existing easement will only be issued once there is documentation that CPW has a legal right to inundate HVR lands as well.</p>
San Luis Valley Ecosystem Council (Christine Canaly)	The Forest Service must clarify if the road could be inundated by additional Reservoir water, and if so, what will be done to mitigate this. Even if the proposed expanded inundation would not cover the	The Environmental Assessment (EA) will clarify if the road will be impacted by the additional inundation. Any mitigations will be analyzed as connected actions.

Commenter	Comment	Forest Service response
and Rocky Smith)	road, any flooding would be more likely to do so with the expanded inundation.	
	Unless the Forest Service and Colorado Parks and Wildlife have, or expect to obtain, permission to inundate a small area of private land, the agencies must clarify how new inundation would be kept off private land	A special use permit to inundate NFS lands outside the existing easement will only be issued once there is documentation that CPW has a legal right to inundate HVR lands as well.
	<p>The effects on eliminating this section of stream fishing must be disclosed, specifically:</p> <ul style="list-style-type: none"> <li>• where would people who now fish this stream section be displaced to</li> <li>• the impacts from additional fishing elsewhere</li> <li>• the quality of the stream fishery to be lost versus other nearby areas</li> <li>• impacts to businesses that offer guided fishing tours</li> </ul>	<p>The EA will address:</p> <ul style="list-style-type: none"> <li>• where would people who now fish this stream section be displaced to</li> <li>• the impacts from additional fishing elsewhere</li> <li>• impacts to businesses that offer guided fishing tours</li> </ul> <p>The EA will address:</p> <ul style="list-style-type: none"> <li>• the quality of the stream fishery to be lost versus other nearby areas</li> </ul>
Hopi Tribe	The Hopi Cultural Preservation Office requests consultation on any proposal with the potential to adversely affect prehistoric sites. If prehistoric cultural resources are identified that will be adversely affected by project activities, please provide us with copies of the cultural resources survey report and any proposed	<p>The Forest Service will consult with the State Historic Preservation Office (SHPO).</p> <p>The Forest Service will provide the Hopi Tribe with the archaeology specialist report and SHPO</p>



Commenter	Comment	Forest Service response
	treatment plans for review and comment.	documents.
	If any cultural features or deposits are encountered during project activities, these activities must be discontinued in the immediate area of the remains and the State Historic Preservation Office must be consulted to evaluate their nature and significance.	<p>If issued, the permit will include a discovery and education clause.</p> <p>The Forest Service will consult with the SHPO if any cultural features or deposits are encountered during project activities.</p>
	If any Native American human remains or funerary objects are discovered during construction they shall be immediately reported as required by law.	The Forest Service will follow all applicable laws and regulations.