



United States
Department of
Agriculture

Environmental Assessment

Operation and Maintenance Plan for the Gennette Creek Ditch Bill Easement

**Ruby Mountains Ranger District
Humboldt-Toiyabe National Forest
Elko County, Nevada
T30N, R57E, Sections 21, 27, 28**

August 2007

Information Contact: Terry Chute, District Ranger, Ruby Mountains/Jarvis Ranger Districts
PO Box 246, Wells, NV 89835
775-752-3357

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Table of Contents

Chapter 1: Introduction	1
Document Structure	1
Background	1
Forest Plan Direction	4
Use of Best Available Science	4
Purpose and Need	4
Project Area	5
Proposed Action	10
Decision Framework	11
Public Involvement	11
Tribe Involvement	11
Issues	11
Significant Issues	12
Non-significant Issues	12
Chapter 2: Alternative Comparison	15
Alternatives Not Considered in Detail	15
Alternatives	15
Mitigation Common to all Alternatives	16
Comparison of Alternatives	17
Chapter 3: Affected Environment	18
Chapter 4: Environmental Consequences	21
Lahontan Cutthroat Trout	21
Other Disclosures	23
Consultation and Coordination	24
Literature Cited	26
Appendix 1	29

CHAPTER 1: INTRODUCTION

Document Structure

The Forest Service has prepared this Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This EA discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternative. The purpose of this EA is to provide environmental analysis that will inform the public, other agencies, and the Forest Service. It is not a decision document; any decision regarding the proposed action will require a separate decision document.

The document is organized into six parts:

- *Chapter 1: Introduction:* This section includes information on the history of the project proposal, the purpose of and need for the project, and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.
- *Chapter 2: Comparison of Alternatives, including the Proposed Action:* This section provides a more detailed description of the agency's proposed action and any alternatives to the proposed action. Also, this section provides a summary table of the environmental consequences associated with each alternative.
- *Chapter 3: Affected Environment:* This section describes the existing environmental condition of the area to which the proposed action applies.
- *Chapter 4: Environmental Consequences:* This section describes the environmental effects of implementing the proposed action and other alternatives. This analysis is organized by environmental component. Within each section, the affected environment is described first, followed by the effects of the no action alternative that provides a baseline for evaluation and comparison of the other alternative.
- *Chapter 5: Agencies and Persons Consulted:* This section provides a list of preparers and agencies consulted during the development of the EA.
- *Literature Cited:* This section is a listing of all literature and references used in the analysis and consideration of the best available science.

Additional documentation, including more detailed analyses of project-area resources, may be found in the project planning record located at the Intermountain Region Ditch Bill Team office, in the Federal Building in Salt Lake City, UT.

Background

Section 501 of FLPMA, the Federal Land Policy and Management Act of October 21, 1976, was amended in October of 1986 by the "Colorado Ditch Bill" (Public Law [PL] 99-545, 90 Stat. 2743; 43 USC [United States Code] 1761). The Colorado Ditch Bill authorized the Secretary of Agriculture to issue permanent easements for qualifying agricultural irrigation or livestock watering water conveyance systems occupying National Forest System (NFS) lands (USDA 2005).

Forest Service Manual (FSM) 2729.16f (USDA 2005) states that “The Colorado Ditch Bill does not exempt the continued use, operation, and maintenance of a qualifying water development facility from the requirements of applicable State and Federal law. Therefore, while granting a standard Ditch Bill easement for a qualifying facility is non-discretionary, the authorized officer may condition that easement beyond the standard terms and conditions in Form FS-2700-9a [Appendix 1] if required by applicable State or Federal law.” The Forest Service must decide what, if any, terms and conditions, as contained in the Operation and Maintenance Plan (OMP), to include in the easement to meet the requirements of 43 USC 1765. This document assesses the effects of the terms and conditions contained in the OMP to be attached to the Gennette Creek easement that will be issued to William Gibson. There are numerous applications for Ditch Bill Easements across the Region. The OMP is specific to the easement area where necessary. However, the OMP contains several conditions that have been developed as “standard” terms and conditions for Ditch Bill easements.

William Gibson applied for an easement for the diversion and conveyance facilities associated with Gennette Creek. The diversion system met all of the requirements listed in Table 1, and is therefore eligible for an easement.

Table 1. Ditch bill eligibility requirements.

<ol style="list-style-type: none">1. The water system must have been constructed and used prior to October 21, 1976;2. The National Forest System land involved must be in a state where the appropriation doctrine governs the ownership of water rights;3. The water system must be used solely for agricultural irrigation or livestock watering purposes;4. The uses served by the water system must not be located solely on federal lands;5. The originally constructed water system facilities must have been in substantially continuous operation without abandonment;6. The applicant must have a valid existing right established under state law to use the water conveyed by the water system;7. The applicant must provide a recordable survey and other information concerning the location and characteristics of the system as necessary for proper management of the National Forest lands involved; and8. The application must be submitted on or before December 31, 1996.

The State Water Right associated with the Gennette Creek diversion dates back to the late 1800s (The Edwards Decree #00391). The water system has been in substantially continuous use for agricultural irrigation for livestock ever since it was developed. The diversion structure and a portion of the ditches are on NFS lands. The water from the Gennette Creek diversion and ditches is used for irrigation of his private land. The application was submitted in the appropriate time period and the Forest Service has all location and characteristic information necessary.

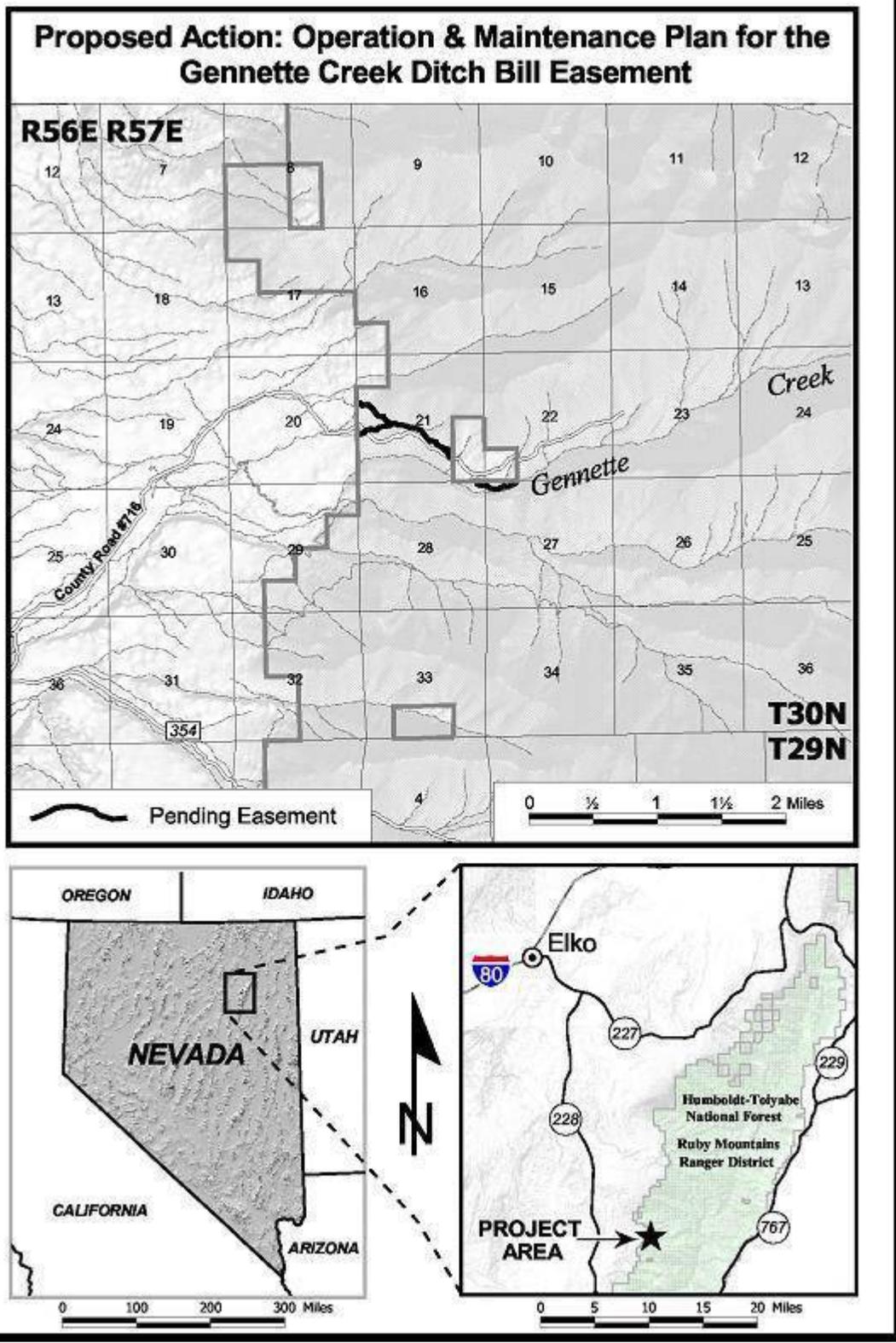


Figure 1 – Project vicinity map.

Forest Plan Direction

As described previously, pursuant to PL 99-545 the Forest Service is obligated to issue Ditch Bill easements to qualified applicants but must also condition the easements as necessary to protect natural resources and property according to 43 United States Code 1765. The Humboldt National Forest Land and Resource Management Plan (Forest Plan) (USDA 1986) established broad programmatic direction for management activities on NFS lands. The plan describes resource management practices, levels of resource production and management, and the availability and suitability of lands for resource management. It also established general direction, standards and guidelines for management activities. The following apply to the proposed OMP:

- **Goal 10** - Identify, protect, interpret and manage significant cultural resources.

- **Goal 15** - Manage classified species, bald eagle (E), peregrine falcon (E), Lahontan cutthroat trout (T) , Bonneville cutthroat trout (S) habitat to maintain or enhance their status through coordination with other land use programs, agency cooperation, and direct habitat improvements. *E= Endangered, T= Threatened, S= Sensitive

- **Goal 29**- Provide water and soil resource input to other resource activities to protect or improve water quality and soil productivity.

- **Goal 43**- Provide access to National Forest lands needed for public use, permittee activities and administration.

The project area is located within the Ruby Mountains Management Area. Management Direction specific to this area that applies to the proposed action includes the following:

- Inventory for Cultural Resources and Protect as appropriate.
- Emphasize Riparian Management.

Use of Best Available Science

The methods used to incorporate the best available science include a review of relevant scientific literature and the information presented by resource specialists in analyses of the proposed activity. Scientific sources relied upon were mostly related to the analyses for wildlife, fisheries, and botany. These sources are cited in the supporting Biological Assessments (BA) and Evaluations (BE), Management Indicator Species (MIS) analysis, and other supporting analyses available in the Project Record. No responsible opposing views to the scientific sources were found. No incomplete or unavailable information, scientific uncertainty, or risk associated with the proposed action and the related analyses were discovered.

Purpose and Need for Action

The Forest Service has determined that William Gibson, owning water rights to the Gennette Creek diversion and ditches, meets the criteria established in the Colorado Ditch Bill and is

entitled to a Ditch Bill easement for transmission of owned water rights via the Gennette Creek diversion and ditches located on NFS lands subject to applicable State and Federal law and regulation. The Forest Service does not have the discretion to deny the Ditch Bill easement for the Gennette Creek ditch and diversion. The “Federal Action” being undertaken by the Forest Service is limited to determining what additional terms and conditions, as contained in an OMP, are to be attached to the easement that the Forest Service will issue. The purpose of the proposed action is to meet the requirements of 43 USC 1761(c)(3)(c) and 1765, which instruct the Forest Service to identify terms and conditions to easements to minimize damage to scenic and aesthetic values and fish and wildlife habitat and other resources, and comply with applicable laws.

Because the facilities have been in operation for decades, the operation of the system as a Ditch Bill easement with the associated proposed OMP would primarily be an administrative change. There would be no change to the scope or intensity of the existing use. The OMP requires additional actions to prevent resource damage.

Ditch Bill easements are not associated with authorization of grazing on NFS lands. The water conveyed by facilities/ditches within a Ditch Bill easement must be used for agricultural irrigation or stock water that is located off of the NFS lands.

Project Area

The pending easement area is located on the Ruby Mountains Ranger District of the Humboldt-Toiyabe National Forest (HTNF), approximately 30 miles south of Elko, Nevada. The legal description is T30N, R57E, Sections 21, 27, 28; Mount Diablo Meridian, Elko County (Figures 1 & 2). The point of diversion (POD) and ditch are within the Gennette Creek Subwatershed, which lies within the South Fork of the Humboldt River Subbasin. The pending easement area is approximately 1/8-mile west of the Ruby Mountains Wilderness (Figure 3). The pending easement area to which the proposed OMP would be applied is 20 feet in width and a total of 1.67 miles in length. Water is conveyed from Gennette Creek into the ditch system which also includes short segments of pipe. Because of a private inholding and a split, the easement has three segments (Figures 1 & 2). (The pending easement and associated proposed OMP do not apply to private land. They apply only to NFS lands.) The first segment of the easement is 2,000 feet long, beginning at the POD on Gennette Creek and continuing to where it intersects with the private inholding. The second segment is 5,180 feet, from where it leaves the private inholding and extending to where it exits NFS lands. The third segment is 1,620' from where it splits from the main ditch (segment two) to where it exits NFS lands (Figure 2).

The diversion structure on Gennette Creek consists of a wood framework with a screw and wheel control headgate structure (Figures 4a- 4e). The diversion is slightly off of the main flow of Gennette Creek (Figure 4c). Just upstream of the diversion, some of the water flows into a curved side channel that is a few feet long and wide. This short channel then curves back and flows into the main Gennette Creek channel (Figure 4c). The irrigation water is initially diverted from this short channel into an open ditch, and then carried in a 24-inch black corrugated pipe at locations where the ditch is unstable or washed out. A Parshall flume and staff gage are present to facilitate monitoring of the amount of flow being diverted. The

applicant's current water right allows the diversion of 1.05 cfs from April 5th to June 15th and 0.43 cfs from June 15th through August 15th annually (The Edwards Decree, #00391).

The easement area is accessed by existing maintenance roads as shown in Figure 5.

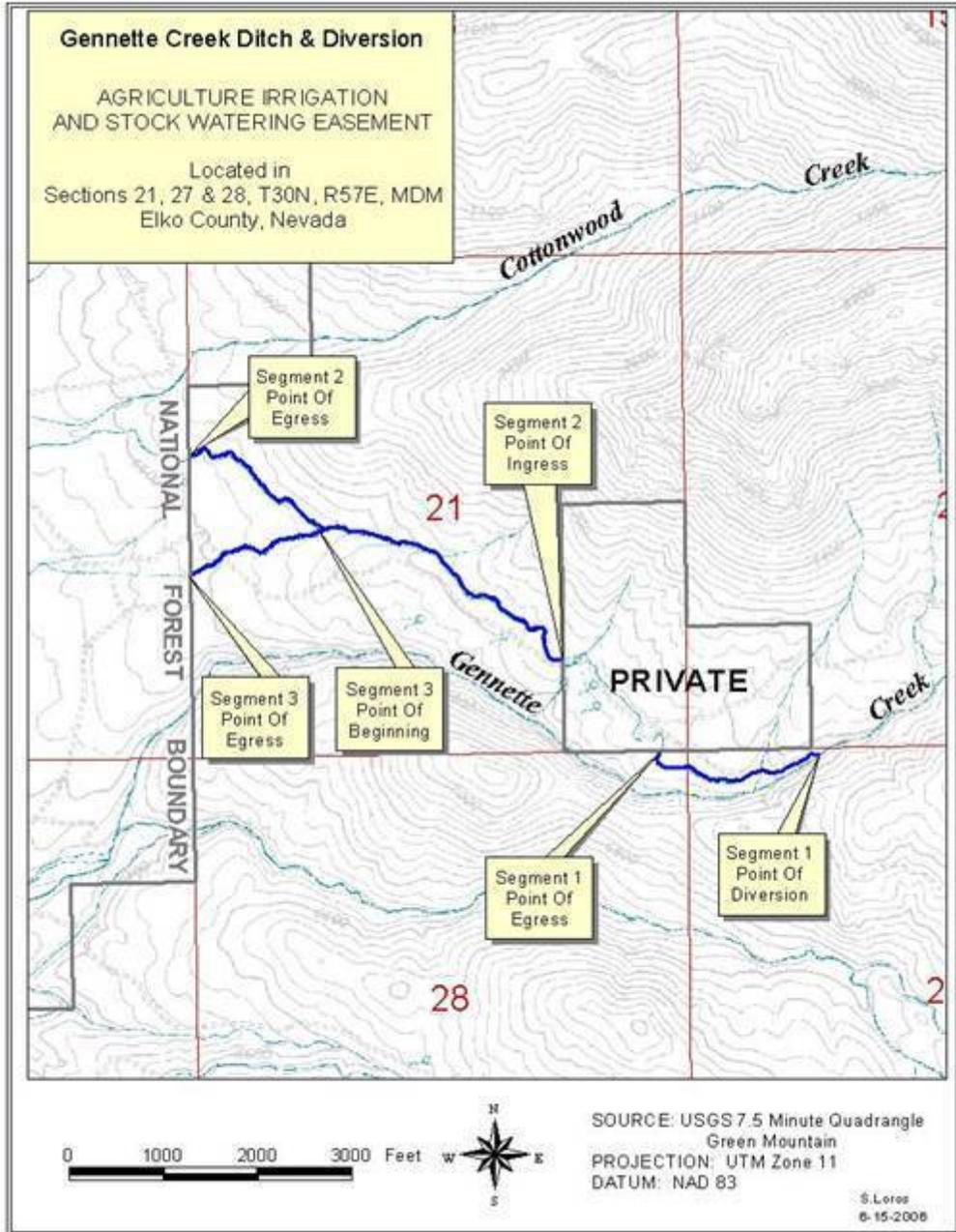


Figure 2: Project area.

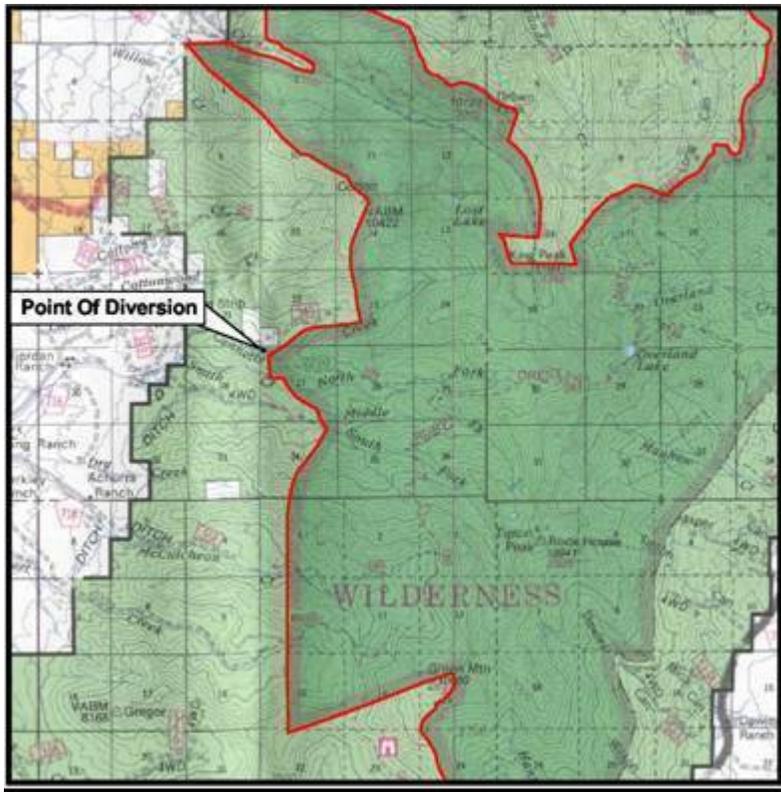


Figure 3. Diversion relative to Ruby Mountains Wilderness.



Figure 4a. Photo of water flowing into the wood frame diversion structure.



Figure 4b. Photo of water flowing out of the diversion. This is the opposite side of the diversion structure shown in Figure 4a.



Figure 4c. Photo taken from the upstream side of the diversion, looking toward the main Gennette Creek flow.



Figure 4d. Photo of water flowing out of the diversion and into the ditch.



Figure 4e. Photo of portion of ditch with 24-inch black corrugated pipe.

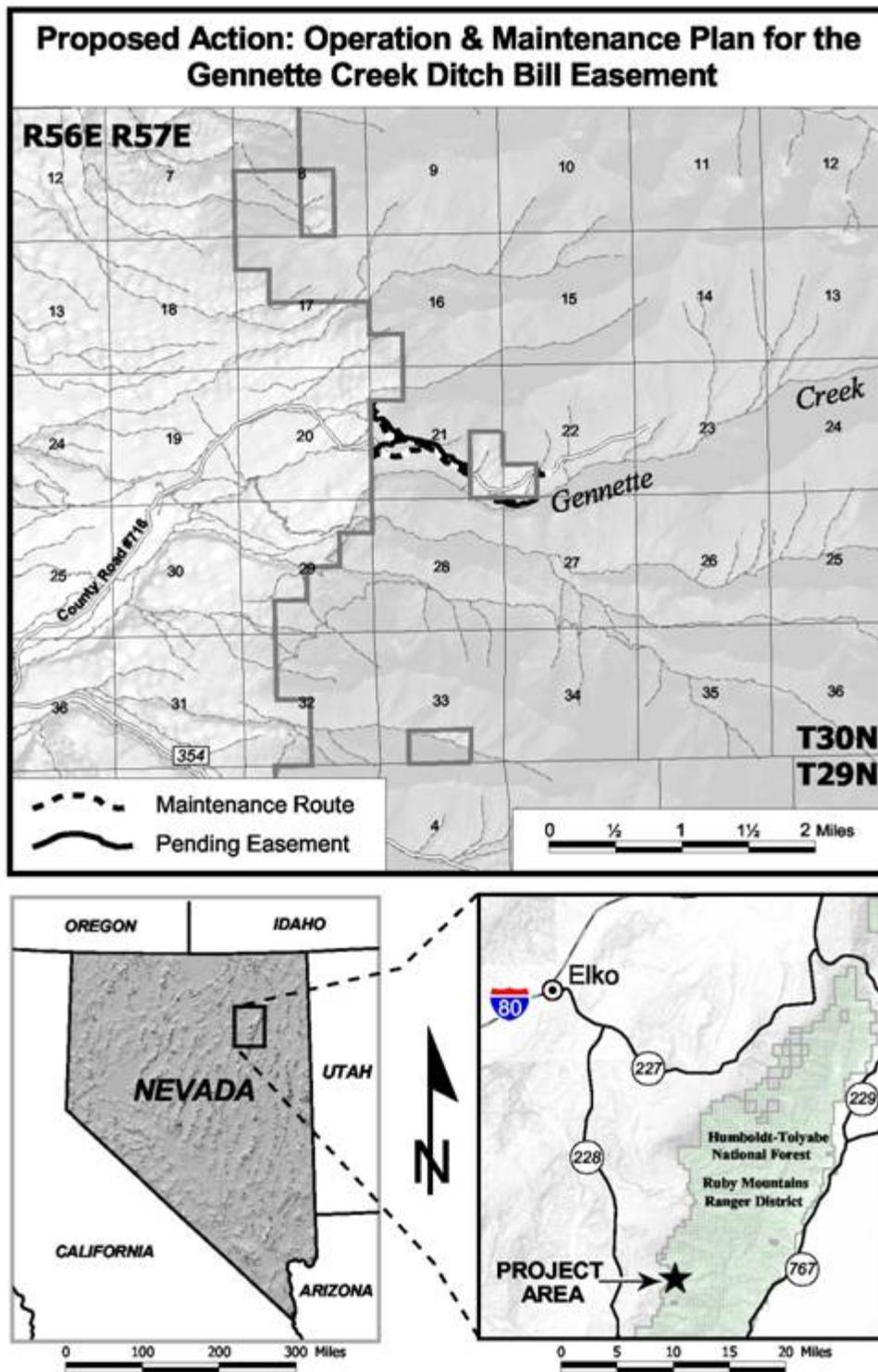


Figure 5. Maintenance route.

Proposed Action

The action proposed by the Forest Service to meet the purpose and need is to make the following OMP part of the Gennette Creek Ditch Bill Easement:

Operation and Maintenance Plan for the Gennette Creek Ditch Bill Easement

1. Regulate channel flows so that a freeboard is maintained above the water line.
2. Use only maintenance routes agreed to and to repair all damage resulting from said use.
3. The Holder shall: be responsible for prevention and control of soil erosion and gulying on land covered by the easement and the land adjacent thereto, resulting from operations and maintenance of granted use; maintain ditch or canal to prevent downcutting and bank failure; remove all obstructions from the ditch or canal or diversion structure; revegetate or otherwise stabilize all ground where the soil has been exposed; be responsible for control of and spread of noxious weeds, as identified by the US Forest Service and the local County weed list. Work in natural channels other than minor or emergency work immediately at the diversion structure requires State and possibly Corp of Engineers advance approval.
4. The Holder shall inspect the facility prior to use each year and make necessary repairs. Work that is considered other than routine maintenance and/or minor repairs shall be discussed in advance with the District Ranger. All repairs shall be acceptable to and completed by the date agreed to by the Holder and the District Ranger.
5. If any items of archaeological, paleontological, or historic value, including but not limited to historic or prehistoric artifacts, structures, monuments, human remains and funerary objects (grave goods) are discovered, the Holder shall immediately cease all activities which may disturb such items. The Holder will notify the Forest Service and shall not resume activities until written approval is given by the District Ranger. Failure to comply with this stipulation may result in civil or criminal penalties under the Archaeological Resources Protection Act of 1979.
6. The Holder will contact the District Ranger for approval before proceeding with work that is other than routine operations. Some of these situations are: Bringing in and using heavy equipment; using other than approved maintenance routes for access; motorized use in a closed area in an emergency situation; removal of significant amounts of vegetation and silt and deposition of the same, if on National Forest System lands; burning, application of seed mixtures, chemical application or other means of vegetation control measures; and reconstruction or re-routing of a portion of the ditch (the latter would also entail a new easement or special use permit).
7. The OMP will be reviewed annually by the Holder and may be amended by mutual agreement when signed and dated by the Holder and the District Ranger.
8. The Holder will cooperate with the Humboldt-Toiyabe National Forest (HTNF), Nevada Department of Wildlife (NDOW), and the U.S. Fish and Wildlife Service (USFWS) to allow the ongoing monitoring of the Lahontan cutthroat trout LCT population in Gennette Creek. Modifications to the diversion facilities are not anticipated. However, if it is determined that the diversion facilities are a threat to the viability of the LCT population in Gennette Creek, the Holder will cooperate with the HTNF and other appropriate agencies to make required modifications. The completion of any such modifications would be dependent upon the availability of funding from Private, State, or Federal sources.

Decision Framework

The responsible official must decide the following:

- ⇒ Whether to apply the proposed OMP to the easement, or if these additional measures are warranted.
- ⇒ Whether an Environmental Impact Statement (EIS) is required.

Public Involvement

The proposal was listed in the Schedule of Proposed Actions on January 1, 2006. The proposal was provided to the public and other agencies for comment during a scoping period that began February 24, 2006 and during two separate comment periods. The original 30-day comment period began on February 24, 2006 with the posting of the legal notice in the Reno-Gazette Journal of Reno, Nevada. During this comment period, three written comments were received. A presentation was made to the Elko County Commissioners about the proposed action during the March 15, 2006 County Commissioners meeting. As a result of discussion at that meeting, the original comment period was terminated to accommodate requests for extra time to comment and also to publish the comment period in the local paper, the Elko Daily Free Press. A new 30-day comment period was initiated with the publication of a legal notice, on March 27, 2006, in the Reno-Gazette Journal, which is the paper of record for Regional Forester decisions on the HTNF. A duplicate notice was published in the Elko Daily Free Press.

One comment was received during the second comment period. No significant issues arose from the public scoping and notice process.

Tribe Involvement

Tribal input was solicited on the proposed action through the mailing of a letter to local tribal governments on February 14, 2006.

Issues

The Forest Service separated the issues into two groups: significant and non-significant issues. Significant issues were defined as those directly or indirectly caused by implementing the proposed action. Non-significant issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality (CEQ) NEPA regulations require this delineation in Sec. 1501.7, "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)..."

1. Significant Issues

The Forest Service in consultation with the U.S. Fish and Wildlife Service (USFWS) identified one issue.

Issue: The diversion and ditch affect Lahontan cutthroat trout habitat and may potentially affect the population.

Background: Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*) (LCT), a threatened species under the Endangered Species Act (ESA), occupy Gennette Creek and are thus a key natural resource associated with the Gennette Creek easement. A BA for LCT was prepared and is available in the Project File (USDA 2006). LCT in Gennette Creek are within the South Fork of the Humboldt River Subbasin. The 1995 LCT Recovery Plan (USDI 1995) does not include the subbasin as having the potential for metapopulations and characterizes the subbasin as having isolated populations subject to local extinctions caused by hybridization with non-native salmonids and loss of habitat from land-use problems. In recent LCT recovery planning, the Humboldt River Distinct Population Segment (DPS) team identified Gennette Creek as a Potential LCT Recovery Area that could in the future be connected to the adjacent Smith Creek Priority LCT Recovery Area (Elliott, J. and Layton, R.W. 2004).

As a potential recovery area and for the purpose of protection of the existing population, the proposed OMP addresses potential effects to this species. The OMP reasonably protects natural resources within the easement area, which in turn protects and maintains the condition of the LCT habitat. The OMP enforces the prevention and control of erosion, revegetation/stabilization of disturbed areas, control of noxious weeds, and advanced permission for use of heavy equipment, burning, and similar activities. These measures protect and maintain the habitat for LCT, since they require cool water, well-vegetated and stable streambanks, and relatively silt-free, rocky substrate in riffle-run areas. The OMP also promotes continued monitoring of the LCT population. The proposed OMP reinforces the understanding that the structure may need modification at some point if necessary to protect the LCT population.

Indicator: Conditioning applied to the easement that is beneficial to LCT habitat and protection of the existing population.

2. Non-Significant Issues

The following issues were raised during the scoping process, but they were determined not to be significant and thus were not addressed in detail:

Issue: Cultural resources may be affected by the operation and maintenance of the easement.

The potential for cultural resources was reviewed by the Forest Archaeologist. No cultural resource concerns were found. Clause number five of the OMP requires reporting and protection if cultural resources are discovered by the holder. The Nevada State Historic Preservation Office (SHPO) reviewed the proposed undertaking and concurred that the project area does not contain features eligible for the National Historic Register of Historic Places.

SHPO, by its letter of September 28, 2004 and the “State Clearinghouse review” letter, dated April 21, 2006, concurred that the project will not pose an adverse effect.

Issue: Threatened, Endangered, and Sensitive Species may be affected by the operation and maintenance of the easement.

Wildlife

No issues associated with terrestrial wildlife were considered “significant”. The wildlife BA (USDA 2003a) concluded that there will be no effect on threatened and endangered wildlife species occurring on the HTNF. The wildlife biological evaluation (USDA 2003a) concluded that there will be no impact on any Forest Service sensitive wildlife species occurring on the HTNF, with the exception of the Columbia spotted frog. The wildlife biological evaluation concluded that maintenance activities associated with easements where Columbia spotted frogs may occur may impact individuals or habitat but will not cause a loss in viability or a trend toward Federal listing.

Additional site-specific information on the species within the project can be found in the Wildlife Biological Assessment and Biological Evaluation prepared for this project.

Plants

No issues associated with plants were considered “significant”. The plant biological assessment/evaluation (USDA 2004) for the HTNF concluded the following: No Threatened or Endangered plant species are known to occur or have potential habitat on the HTNF. The Federal Action will have no impact on Candidate Species, Weber ivesia (*Ivesia webberi*). It is not a wetland or riparian species and is not likely to occur at a point of diversion. Sensitive species Laomille Canyon Milkvetch (*Astragalus robbinsii* var. *occidentalis*) could have habitat or potential habitat within the Federal Action’s geographic range of impact of the Gennette Creek Easement. It is riparian dependent and occurs near streambanks or higher elevation meadow margins in Nevada. The Federal Action may impact individuals or habitat, should they exist at a point of diversion, but would not cause a loss of viability or trend toward federal listing. There will be 'no impact' to any of the other HTNF Sensitive Plant species, no habitat or potential habitat occurs within the project area. Additional site-specific information on the species within the project area can be found in the Plant Biological Evaluation prepared for this project.

Fish

LCT are discussed above under Significant Issues. The sensitive Bonneville cutthroat trout is not present in Gennette Creek. There would be no impact on this species. Additional site-specific information on Bonneville Cutthroat trout can be found in the Fish Biological Evaluation (USDA 2003b).

Issue: Treatment of weeds and other vegetation control within the easement area may affect fish and other species.

The easement does not allow treatment of weeds through herbicides or burning without the permission of the District Ranger. Any treatment would be according to District protocol and any additional analysis would be carried out as needed as the situation requires.

Issue: Management Indicator Species may be affected by the operation and maintenance of the easement.

MIS are species designated as indicators of the health of the Forest’s natural resources. There are six MIS listed in the Forest Plan. The species and the habitat they represent are listed below in Table 2. Since the proposed alternative is primarily an administrative change, there would be no reduction or adverse alteration of the existing habitat. Other than LCT, the only other trout species in Gennette Creek is brook trout. Mule deer, sage grouse, and northern goshawk are the three terrestrial wildlife species. The proposed OMP would not affect habitat for any of these species. Further information on these species can be found in the MIS and Migratory Bird Treaty Act Report (USDA 2007). Bonneville cutthroat trout are not present in Gennette Creek. The condition of the riparian habitat is discussed in Chapter 4 as it relates to LCT.

Table 2. Management indicator species.

Species	Vegetation Type
Mule deer	All vegetation types
Sage grouse	Sagebrush-grass, riparian
Goshawk	Old growth, cottonwood, aspen and fir stands associated with riparian areas
Lahontan cutthroat trout	Riparian
Bonneville cutthroat trout	Riparian
Other trout species	Riparian

Issue: The Ruby Mountains Wilderness may be affected by the proposed OMP.

The Ruby Mountains Wilderness is approximately 1/8-mile from the easement areas. The proposed OMP would not have any effect on the wilderness as the easement is outside the boundary (see Figure 3).

Issue: Grazing within the easement area may cause erosion.

The diversion and ditches of the pending Gennette Creek Ditch Bill easement are in the Gennette Creek Pasture of the Cottonwood C&H allotment permitted to Zunino Ranches, Inc. However, the authorizations for these two actions (the Ditch Bill easement and grazing allotment) are independent of each other. Zunino Ranches, Inc. and William Gibson have no contractual relationship in terms of use of the allotment or the ditches and diversion. The grazing within the easement area is associated with the allotment permitted to Zunino Ranches, Inc. and would occur regardless of the Ditch Bill easement and the action addressed in this document of applying the proposed OMP to the easement. The Ditch Bill easement does require the prevention and control of erosion that may be caused by operation of the diversion and ditch. Grazing within the easement area is addressed in the Cumulative Effects section further down in this document.

CHAPTER 2: ALTERNATIVE COMPARISON_____

This chapter describes and compares the alternatives considered for the OMP for the pending Gennette Creek Ditch Bill Easement. It includes a description of each alternative considered. This section also presents the alternatives in comparative form, defining the differences between them and providing a clear basis for choice among options by the decision maker and the public.

Alternatives Not Considered in Detail_____

An alternative which would have added a requirement in the OMP to construct a fish screen at the Point of Diversion (POD) to prevent entrainment (passage through the diversion structure and into the diversion ditch) of LCT and other fish and organisms, was considered. However, upon field review of the diversion by Forest Service and Nevada Department of Wildlife (NDOW) fish biologists, it was determined that entrainment of LCT was expected to be minimal due to the location of the diversion away from the main stream flow (Figure 4c). Therefore screening the diversion was not expected to change the status of the LCT population in Gennette Creek. Installation of a new diversion with a self-cleaning screen was unlikely at the POD due to the lack of area required to install such a structure. Maintenance of a screen installed on the existing diversion could also be problematic due to its isolated location. However, future monitoring may indicate that installation of a screen or other modification for the LCT is necessary. The Holder will cooperate with the HTNF, NDOW, and the USFWS to allow the ongoing monitoring of the LCT population in Gennette Creek and monitoring of LCT entrainment through the diversion. Modifications to the diversion facilities are not anticipated. However, if it is determined that the diversion facilities are a threat to the viability of the LCT population in Gennette Creek, the Holder will cooperate with the HTNF and other appropriate agencies to make required modifications. The completion of any such modifications would be dependent upon the availability of funding from Private, State, or Federal sources.

Alternatives_____

Alternative 1 - No Action

Under the No Action alternative, the standard Ditch Bill easement would be issued without any additional terms and conditions as contained in the OMP. Use of the diversion and ditch would continue as it has historically. No additional mitigation of the potential effects on LCT and other resources would be required. Although there would be no OMP attached, the easement would contain a reopener clause that would be implemented if necessary to change the terms and conditions of the easement for LCT.

Alternative 2 - The Proposed Action

The Forest Service would issue an easement to the applicant, and the easement would include terms and conditions as contained in the attached OMP (described above under Proposed Action), to mitigate effects to resources in the easement area and particularly those to LCT.

1. The first clause requires the Holder to ensure there is freeboard between the top of the ditch and the normal water level in the ditch.
2. The second clause limits access to diversion and ditch to specific maintenance routes.
3. The third clause requires the holder to prevent and control soil erosion and revegetate or stabilize areas disturbed by their operations, and control noxious weeds.
4. The fourth clause requires a yearly inspection and repairs/maintenance prior to use.
5. Clause five identifies what are considered cultural resources, and directs the holder to cease operations and notify the Forest Service when any are discovered. Operations cease until the holder receives formal notification that activities can resume.
6. The sixth clause identifies activities that the holder should notify the District Ranger in advance of work to obtain approval for the proposed work.
7. The seventh clause requires an annual review of the OMP and that any amendments be approved and agreed to with the District Ranger.
8. The eighth clause identifies that the easement holder is to work with necessary agencies in the continued monitoring of LCT and to cooperate to make any modifications to the diversion should the need for changes arise.

The OMP is incorporated as part of the easement, and contains terms and conditions that are binding on the easement holder. In total, the clauses of the proposed OMP are designed to protect cultural resources and natural resources while permitting the holder to operate and maintain the water conveyance facilities. The clauses are designed to reduce disturbance of soil and plants, prevent/control erosion, stabilize disturbed areas, control noxious weeds, and repair and maintain facilities. These measures protect a number of other natural resources, most notably the LCT, which require cool water that is relatively free of silt and sedimentation. The clauses also require advanced approval for activities that are beyond routine maintenance, such as the use of heavy equipment, burning, and chemical application. In this way, if these activities are necessary, they would be accomplished according to current District standards. The OMP also enforces the continued ongoing monitoring of the LCT population.

Mitigation Common to All Alternatives _____

The easement will have a re-opener clause allowing modification of the terms and conditions of the easement to address changes required to comply with the Endangered Species Act or other applicable Federal or State law. The reopener clause reads as follows:

Pursuant to the requirements of 36 CFR 251.56(b)(1)(v) (eCFR 2007b), the terms and conditions for operation and maintenance set forth in this section, and any operations

and maintenance plan incorporated in this easement pursuant to paragraph (f) of this section, may be revised or modified by the authorized officer upon determination that:

1. Modification or revision of such terms and conditions is necessary to comply with the requirements of the Endangered Species Act of 1973 (16 USC. 1531 *et seq*) or applicable State or Federal law.
2. Terms and conditions contained herein are no longer needed to comply with the requirements of applicable State or Federal law.

This clause is applicable to the ‘No Action’ as well as the ‘Proposed Action’ alternative.

Project Monitoring and Evaluation_____

The HTNF will continue to coordinate with NDOW in the monitoring of LCT populations in Gennette Creek. The proposed OMP requires that a yearly review of the OMP conditions be completed. The USFWS, NDOW, and the Forest Service, in combination with other interested parties will continue to promote LCT recovery and monitor accordingly. Additional monitoring associated with the Terms and Conditions of the Biological Opinion (BO) (USDI 2007) will also be implemented if Alternative 2 is selected.

Comparison of Alternatives_____

This section provides a brief summary of the effects of implementing each alternative. Information in Table 3 is focused on activities and effects where different levels of effects or outputs can be distinguished quantitatively or qualitatively among alternatives.

Table 3– Comparison of Alternatives.

	No Action Alternative 1	Proposed Action Alternative 2
Protection of natural resources in easement area	No additional terms and conditions (beyond those included in the easement) provide for protection of natural resources.	Additional terms and conditions applied to the easement which provide for protection of natural resources. These include reduction in erosion and sedimentation, control of noxious weeds, and protection of cultural resources.
Protection of LCT habitat and populations	No additional terms and conditions to protect and maintain LCT habitat. No stipulations for monitoring coordination. Potential greater loss of individual LCT.	Additional terms and conditions to protect and maintain LCT habitat, including a stipulation requiring coordination in monitoring of LCT. Terms and Conditions associated with the Biological Opinion (USDI 2007) issued by the FWS require more indepth and specific monitoring. Likely smaller loss of individual LCT.

CHAPTER 3: AFFECTED ENVIRONMENT

This chapter presents an overview of the resources and uses within the project area. Additional information can be found in the Forest Plan. A brief overview of the Gennette Creek water conveyance system is also presented.

1. Environment

The Gennette Creek diversion and ditch are located in the Gennette Creek subwatershed, within the Humboldt River Subbasin. Based on field review by the Intermountain Ditch Bill Team fish biologist, on June 25, 2002, approximately 3.5 cfs was flowing in Gennette Creek. The stream had an average wetted width of 12 feet. The water was clear and cold. There appeared to be good water quality and the instream habitat appeared to have good quality for a fishery (USDA 2003b).

2. Topography

The Gennette Creek easement area is 6,400'-6,900' in elevation.

3. Hydrology

The mountain ranges in northeast Nevada are among the wettest in the state. Precipitation usually averages over 20 inches per year at the higher elevations above 8,000 feet. Gennette Creek is within the South Fork of the Humboldt River subbasin. Based on field observation in June of 2002, Gennette Creek had an approximate flow of 3.5 cfs.

4. Wildlife

Numerous wildlife species inhabit the general area of the easement. Common species include mule deer and coyotes. Less common species may occur and are addressed in the Biological Assessments and Evaluations for this project.

5. Fisheries

The diversion structure is not a physical barrier to fish movement in Gennette Creek. Presently, the diversion is unscreened which could allow fish movement into the diversion channel. However, the POD is situated such that the water is diverted off of the main channel flow, which decreases the potential for fish movement into the diversion channel.

Lahontan cutthroat trout, which is listed as "threatened" under the Endangered Species Act, occupy Gennette Creek. LCT in Gennette Creek are within the South Fork of the Humboldt River Subbasin. The following information on LCT comes primarily from Gerstung 1988, USDI 1995, and Elliott and Layton 2004.

In 1975, the LCT was listed as threatened under the Endangered Species Act of 1973, as amended (Federal Register Vol. 40, p. 29864). Critical habitat has not been designated for LCT.

LCT inhabit lakes and streams and require spawning and nursery habitat characterized by: cool water, pools in close proximity to cover and velocity breaks, well-vegetated and stable streambanks, and relatively silt-free, rocky substrate in riffle-run areas.

Historic habitat included much of northern, central, and western Nevada, eastern California, and southeastern Oregon. Principal threats to LCT include habitat loss associated with livestock grazing practices, urban and mining development; water diversions; poor water quality; and hybridization or competition with non-native trout.

Distribution.—The LCT is found in lakes and streams in the Lahontan Basin of Nevada and adjacent portions of California. Lahontan cutthroat trout (LCT) are separated into three Distinct Population Segments (DPS) based on geographic isolation and genetic similarities. Streams within the Truckee, Carson, and Walker river basins comprise the western DPS. A DPS for LCT is also established for the Humboldt River Basin. The remaining DPS is the Northwestern, which is geographically located in the Quinn River, Blackrock Desert area of northwestern Nevada.

Description.—The LCT is one of several subspecies of cutthroat trout (*Oncorhynchus clarki*). Typically, cutthroat trout have an elongated, slightly compressed body and show a bright red stripe or “cutthroat” mark under each side of the lower jaw. The LCT, generally the largest cutthroat subspecies, ranges in size from 9-15 inches. Historically in the large lakes of the Lahontan Basin, this subspecies grew to very large sizes, and was probably the largest of any inland North American trout. It is greenish to bluish above and silvery below with large, roundish dark spots covering the body and extending to the head and ventral surface. The head, fins, and sides may be yellowish.

Reproduction.—Reproduction of LCT is similar to that of other cutthroat trout. They spawn in the spring, usually April-July depending on stream flow and water temperature. They require clean gravel substrate and water temperatures of about 57 degrees F for spawning. Females build redds in gravel beds of streams and don’t guard their eggs or fry. Eggs hatch in 4-6 weeks depending on water temperature. Growth is variable depending on habitat quality. They may reach sexual maturity in 2-3 years in streams and 3-5 years in lakes.

Food.—Small cutthroat feed on small invertebrates such as aquatic insects. As they grow they feed on larger invertebrates and small fish. Large lake-dwelling adults are almost entirely piscivorous.

Habitat.—Cutthroat trout are found in cool, well-oxygenated water throughout their lives. In streams, they use rocky areas, riffles, deep pools, and areas under logs and overhanging banks. Cover is an important component of cutthroat habitat. Optimally, at least 25% of the stream area will provide cover. Lahontan cutthroats also inhabit lakes, although they move to streams to spawn. They are able to withstand high water temperatures for short periods of time on a daily basis and are adapted to highly mineralized water commonly found in the Lahontan Basin.

Management Implications.—The LCT has declined throughout its range and currently occupies only a small fraction of its historic range. Habitat has been

damaged from mining operations, timber harvesting, forest fires, and livestock grazing. Dams and water diversions have directly eliminated habitat. Many populations have been eliminated as a result of introduction of predatory, competing, or hybridizing non-native species. Management strategies include stream rehabilitation, construction of fish ladders, and restocking from captive populations of LCT in hatcheries.

Environmental Baseline.— Throughout its range, many LCT populations exist in small isolated streams and continue to be vulnerable to local extirpations. This vulnerability in part is due to historic irrigation practices. Since its listing, little has been done with local landowners to develop solutions to problems related to irrigation. The regulated flow of water for irrigation and domestic water supply has affected floodplains, lake levels, water quality, aquatic and terrestrial wildlife and plant communities, and movements of LCT in and out of spawning and rearing tributaries (USFWS 1994).

Gennette Creek was surveyed on September 23-24, 1999, by the Nevada Department of Wildlife. Lahontan cutthroat trout were found at an average population size of 105.6 fish per mile for 2.5 miles. They occur above and below the established point of diversion.

The 1995 LCT Recovery Plan does not include the subbasin as having the potential for metapopulations and characterizes the subbasin as having isolated populations subject to local extinctions caused by hybridization with non-native salmonids and loss of habitat from land-use problems. In recent LCT recovery planning, the Humboldt River Distinct Population Segment (DPS) team identified Gennette Creek as a Potential LCT Recovery Area that could in the future be connected to the adjacent Smith Creek Priority LCT Recovery Area (Elliott, J. and Layton, R.W. 2004).

Brook trout, a non-native species also inhabits Gennette Creek. They have an estimated total population size of 866 individuals. This species presents a substantial threat to LCT due to hybridization and competition for resources.

6. Vegetation

The project area has good riparian habitat at the POD, with species such as rose bushes, river birch, grass, cottonwood trees, willows, and sagebrush.

7. Recreation

There is no public recreation opportunity within the immediate area of the Gennette Creek easement.

8. Designated Wilderness

The Ruby Mountain Wilderness is approximately 1/8 mile from the easement area. The Nevada Wilderness Protection Act, which designated this wilderness, was passed by Congress and signed into law in 1989. The approximate size is 37,000 acres.

9. Cultural Resources

The easement area was assessed for potential cultural resources. No resources are known to be present in the easement area.

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

This section summarizes the physical and biological effects of implementing the two alternatives. The discussion of the potential effects is focused on the significant issue that first was raised during the analysis and then displayed in Chapter 1 of this EA. The analysis therefore focuses on effects to LCT. Additionally, it compares how well the alternatives meet the purpose and need of protecting LCT habitat and populations and other natural resources. The direct and indirect effects analysis area includes the pending easement which includes the diversion, ditch, and maintenance routes.

Lahontan Cutthroat Trout

As previously described, Gennette Creek provides habitat for threatened Lahontan cutthroat trout.

Effects Common to Both Alternatives

LCT are currently able to access the diversion and individuals may be lost to the population. As described in Chapter 2, under the heading “Alternatives Not Considered in Detail”, screening of the diversion is not currently believed to be necessary or practical. Thus, no modifications to the diversion are currently projected. Under both alternatives, it is possible for LCT to be lost in the diversion channel. Entrainment of LCT is expected to be minimal due to the location of the diversion away from the main stream flow. The population of LCT in Gennette Creek will continue to be monitored. The operation of the diversion under both the no action and proposed action results in potential adverse effects to LCT. This is partly because of the potential for entrainment of LCT and also due to the withdrawal of water from Gennette Creek, within the easement area, which is authorized and regulated by the Nevada Division of Water Resources. The OMP is designed to reduce the potential effects to LCT.

The amount of water being removed from Gennette Creek is the same for both alternatives. The amount of water permitted is regulated by the holder’s water right issued by the State of Nevada. The holder’s water right priority date is between 1871 and 1900. The use of the water decreases the flow available in Gennette Creek during the time that the holder is using the water (between April 15 and August 15). Reduced flows could decrease the depth of pools, which would lead to less habitat diversity resulting in reduction of resting areas and fewer numbers of pools that can provide refuge for the fish. Shallower water could increase the water temperature, and warmer water would promote formation of algae on the stream substrate. This can reduce the niches available for desirable aquatic invertebrates and as the algae dies it can cause a deficit of oxygen in the stream, which could limit the aquatic species that can live in the community. Water temperatures above 24 degrees Celsius can be limiting or even lethal to LCT.

Reduced flows could create a migration barrier to fish as they move to their spawning habitat. However, the diversion structure on Gennette Creek is not a barrier to fish migration.

Alternative 1: No Action

Under Alternative 1, there would not be any constraints or requirements to the operation and maintenance of the easement area, beyond what is required within the easement (Appendix 1). This alternative does not require any operation and maintenance to protect and maintain the riparian and stream habitat of Gennette Creek. The specifications of the easement itself (Appendix 1) designate the holder as responsible for the restoration and mitigation of any damage caused by the use and occupancy of the easement area. However, the easement relies on an attached OMP to describe specific actions and requirements which would keep the area protected to avoid any damage. Without an attached OMP, the easement does not provide proactive measures to avoid resource damage and specific instructions to avoid damage to LCT habitat, other organisms, or resources.

Alternative 2: Proposed Action

This alternative provides specific requirements through the OMP to avoid resource damage caused by erosion, noxious weeds, and structure maintenance. This alternative conditions the easement in a proactive way to avoid and minimize resource damage. By conditioning the easement through the proposed OMP, it eliminates misunderstanding about the holder's responsibilities and how to approach situations that may arise. This in turn may reduce the number of LCT lost due to operation of the diversion. The OMP also reinforces the need for continued monitoring of LCT and the associated coordination with the holder. The OMP also emphasizes that modifications to the diversion may be required at some point in the future should monitoring indicate that modifications are needed to protect the LCT population.

Implementation of this alternative would require the HTNF to comply with the Terms and Conditions associated with the Reasonable and Prudent Measures of the BO.

A BA for Fisheries (USDA 2006) addressing LCT has been written. A *Likely to Adversely Affect* determination for LCT was made, partly because of the potential for entrainment of LCT and also due to the withdrawal of water from Gennette Creek, within the easement area, which is authorized and regulated by the Nevada Division of Water Resources. (These same effects are present under both alternatives.) Formal Consultation with USFWS was completed. The OMP is designed to reduce the potential effects to LCT. Selection of the Proposed Action, Alternative 2, would require that the HTNF comply with the Terms and Conditions of the BO. A BO documents the USFWS opinion as to whether or not the Federal action (implementing the proposed OMP) is likely to jeopardize the continued existence of listed species (LCT). The BO also summarizes the information on which the Opinion is based and details the effects of the action on the listed species being addressed. Incidental take is any take (kill, harass, harm or adversely affect) of a listed species that results from, but is not the purpose of, carrying out a lawful activity conducted by the Federal agency or applicant. The incidental take statement defines the amount or extent of "take" and provides Reasonable and Prudent measures and associated Terms and Conditions which must be followed to minimize the amount of take.

Cumulative Effects

40 CFR 1508.7 (eCFR 2007c) defines cumulative impact as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. The Gennette Creek subwatershed was considered the area in which to assess cumulative effects. Diversion of water from Gennette Creek, cattle use on private and NFS lands, and the presence of Brook Trout within occupied LCT habitat are likely impacting the LCT population. Operation of the diversion may be reducing the LCT population to some extent and causes some unavoidable habitat degradation. However, the action being analyzed here is applying the proposed OMP to the easement. The OMP promotes action to address erosion/sedimentation and promotes protection and maintenance of LCT habitat. As previously mentioned, there will be no increase in the scope or intensity of use. The action (implementing the proposed OMP) promotes beneficial actions which improve the resource conditions and habitat in the area. Therefore, the proposed action would not result in any incremental adverse impact and therefore does not contribute to cumulative effects other than the direct positive effects associated with implementation of the proposed OMP.

Other Disclosures

1. Irretrievable and Irreversible commitments of resources

The action of applying the proposed OMP to the easement would not result in irretrievable or irreversible commitments of resources.

2. Environmental Justice

In accordance with Executive Order 12898, impacts to low income and minority communities were assessed. No adverse or disproportionate impacts to low income or minority communities have been identified.

3. Beneficial and adverse impacts

Beneficial and adverse impacts are displayed throughout this chapter.

4. Public health or safety

There are no impacts to public health or safety from any of the proposed action.

5. Unique characteristics of the geographic area

There are no unique characteristics within the project area.

6. Highly controversial effects

Based upon the analysis presented in this EA, the effects are not highly controversial.

7. Uncertain, unique or unknown risks

The proposed action does not pose any uncertain, unique or unknown risks to the human environment.

8. Precedent for future actions

Approval of the action alternative does not set a precedent for any future actions.

9. Cumulatively significant impacts

Cumulative impacts are discussed accordingly in this chapter.

10. Districts, sites, highways, structure, or objects listed in or eligible for listing in the National Register of Historic Places

Impacts to cultural and historic resources have been assessed as part of the analysis process. Results of this work are documented in the project file.

11. Scientific, cultural, or historical resources

There would be no impact on scientific, cultural, or historical resources.

CHAPTER 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:

FEDERAL, STATE, AND LOCAL AGENCIES:

U.S. Fish and Wildlife Service, Reno, Nevada

Nevada Department of Wildlife

Nevada Division of Water Resources

Kirk Owsley, Nevada Division of Water Resources

TRIBES:

Chairperson Joseph Holley, Battle Mountain Band

Chairperson Hugh Stevens, Elko Band Council

Chairperson Terry Gibson, Shoshone-Paiute Tribes of Duck Valley

Chairperson Jerry Millet, Duckwater Shoshone Tribe

Chairperson Diana Buckner, Ely Shoshone Council

Chairperson Amos Murphy, Goshute Tribe

Chairperson Ronnie Woods, South Fork Band Council

Chairperson Hugh Stevens, Te-Moak Tribe of Western Shoshone

Chairperson Kristi Begay, Wells Band Council

OTHERS CONTACTED:

A complete list of other parties contacted is available in the project file.

LITERATURE CITED

- CEQ, Council on Environmental Quality. Regulation 1501- NEPA and agency planning mandate. Section 1501.1-1501.8. 2 pp.
- eCFR, Electronic Code of Federal Regulations. 2007a. 7 CFR 1.130-1.151.
- eCFR, Electronic Code of Federal Regulations. 2007b. 36 CFR 251.56.
- eCFR, Electronic Code of Federal Regulations. 2007c. 40CFR 1508.8.
- Elliott, J. and Layton, R.W. 2004. Lahontan cutthroat trout species management plan for the upper Humboldt River drainage basin. Draft. December 2004. Nevada Department of Wildlife. 52 pp. plus Appendices.
- The Edwards Decree #00391. The Nevada Department of Conservation and Natural Resources, Division of Water Resources.
- Federal Register. 1975. Title 50-Wildlife and Fisheries. Chapter I – Unites States Fish and Wildlife Service, Department of the Interior Part 17- Endangered and Threatened Wildlife. Threatened Status for Three Species of Trout. Volume 30, No. 137, pg. 29864. July 16, 1975. 2 pp.
- Gerstung, E.R. 1988. Status, life history and management of the Lahontan cutthroat trout. Am. Fish. Soc. Symp. 4:93-106.
- Nevada State Historical Preservation Office. September 28, 2004. Letter documenting no adverse effect.
- NEPA. 1969. National Environmental Policy Act.
- NFMA. 1976. National Forest Management Act.
- Public Law 99-545. Ditch bill Act of October 27, 1986 (HR 2921).
- State of Nevada Department of Administration, State Historic Preservation Office. 2006. Letter in response to Scoping and NOPA. April 21, 2006.
- United States Code. Title 43 – Public Lands. Chapter 35, Federal Land Policy and Management Act, Subchapter V. Rights of Way. Sect. 1761. 1 pp.

- United States Code. Title 43 – Public Lands. Chapter 35, Federal Land Policy and Management Act, Subchapter V. Rights of Way. Sect. 1765. 1 pp.
- USDA Forest Service. 2007. Management Indicator Species Analysis and Migratory Bird Treaty Act Report. M. McCammon.
- USDA Forest Service. 2006. Revised biological assessment for the proposed operation and maintenance of the Gennette Creek Easement within the Humboldt-Toiyabe National Forest for Lahontan cutthroat trout, *Oncorhynchus clarki henshawi*. Author: J. Harvey. September 29, 2006.
- USDA Forest Service. 2005. Forest Service Manual. FSM Chapter 2720- Special Uses Administration. Interim Directive No.: 2720-2005-2.
- USDA Forest Service. 2004. Biological assessment and evaluation of the effects on: threatened, endangered, proposed, candidate, and sensitive plants, resulting from the Standard Operation and Maintenance Plan for Easements issued under the Colorado Ditch Bill Easement [Act, 43 U.S.C. 1761(c), Public law 99-545]. Humboldt Toiyabe National Forest. Region 4. Author: S. Foster. May 7, 2004.
- USDA Forest Service. 2003a. Biological assessment/evaluation of the effects on: endangered, threatened, or proposed wildlife species and critical habitat; and sensitive wildlife species, resulting from the Standard Operation and Maintenance Plan for Easements issued under the Colorado Ditch Bill Easement [Act, 43 U.S.C. 1761(c), Public law 99-545]. Humboldt Toiyabe National Forest. Region 4. Author: M. McCammon. November 23, 2003.
- USDA Forest Service. 2003b. Humboldt-Toiyabe National Forest biological evaluation for the operation and maintenance of a proposed ditch bill easement within the Ely Ranger District for Bonneville cutthroat trout, *Oncorhynchus clarki utah*. Author: F. Mangum. August 18, 2003.
- USDA Forest Service. 1986. Humboldt National Forest Land and Resource Management Plan.
- USDI Fish and Wildlife Service. 2007. Biological opinion on the operation and maintenance of proposed Ditch Bill easements on the Humboldt-Toiyabe National Forest. June 18, 2007. 29 pp.
- USDI Fish and Wildlife Service. 2003. Letter to Region 4, Forest Service, with species list. April 24, 2003 and November 3, 2003.
- USDI Fish and Wildlife Service. 1995. Lahontan cutthroat trout, *Oncorhynchus clarki henshawi*, Recovery Plan. Portland. OR. 147 pp. Elliott, J. and Layton, R.W. 2004. Lahontan cutthroat trout species management plan for the upper Humboldt River

drainage basin. Draft. December 2004. Nevada Department of Wildlife. 52 pp. plus Appendices.

USDI Fish and Wildlife Service. 1973. Endangered Species Act, 16 U.S.C. 1531-1544. Fish and Wildlife Service.

APPENDIX 1- SAMPLE OF EASEMENT PORTION OF FORM FS-2700-9A

Authorization ID: _____
Contact ID: _____
Use Code: _____

FS-2700-9a (03/06)
OMB No. 0596-0082

U.S. DEPARTMENT OF AGRICULTURE
Forest Service
AGRICULTURE IRRIGATION AND LIVESTOCK WATERING SYSTEM EASEMENT
Act of October 21, 1976, Act of October 27, 1986
(Pub. L. 99-545), 36 CFR 251, Part B

THIS EASEMENT issued this ____ day of _____, 200__ by the **UNITED STATES OF AMERICA**, acting by and through the Forest Service, Department of Agriculture, hereinafter called the grantor, to *****, an individual of the State of *****, hereinafter called the Holder.

The Holder has applied for an easement under Section 501 of the Federal Land Policy and Management Act of October 21, 1976, as amended by P. L. 99-545 (*90 Stat. 2743; 43 U.S.C. 1761*), for agricultural irrigation or livestock watering system facilities located on lands owned by the United States on the ***** National Forest, in the County of ***** State of *****. The description of the authorized facilities is as follows:

Project Name: *****

Location (legal description): *****

Description of Improvements: *****

Upon acceptance of this easement the holder relinquishes all right, title, and interest in and to any easement issued for the same lands by the United States by any previous grant or permit.

The United States does hereby grant, subject to valid existing rights, an easement for occupancy with water conveyance system facilities of lands shown on the plats contained in **Exhibit A**, attached hereto and incorporated herein, as provided by the holder and hereby accepted by the Authorized Officer.

This easement is issued subject to the following terms, provisions, and conditions applicable to the holder, its permittees, contractors, assignees, and successors in interest.

1. Authorized Use. This easement authorizes only the right-of-way and water conveyance system facilities as constructed and operated on October 21, 1976, as specified herein.
2. Extensions or Enlargements. This easement does not authorize extensions or enlargements of the water conveyance system.
3. Fees. This easement is issued free of charge.
4. Transferability. This easement is fully transferable provided the water conveyance system facilities are used for agricultural irrigation or livestock watering. The holder shall notify the grantor within sixty (60) days of any address change or change in ownership.
5. Tenure. This easement shall continue for as long as the above described lands and water conveyance system facilities are used, operated, and maintained in accordance with the terms and conditions herein described.

6. Operation and Maintenance.

- a. The holder agrees to operate and maintain the facilities and use the authorized easement in accordance with applicable Federal, State, and local laws, regulations, and standards.
- b. The holder shall notify, consult with, and obtain concurrence of the grantor for operation and maintenance of the authorized facilities.
- c. The holder agrees to install and maintain an operable headgate at each diversion structure. Such headgate shall be capable of controlling the amount of water entering the system.
- d. The holder will not use fire or herbicides on the authorized right-of-way except as permitted in writing by the grantor.
- e. Pursuant to the requirements of 36 CFR 251.56(b)(1)(v), the terms and conditions for operation and maintenance set forth in this section, and any operations and maintenance plan incorporated in this easement pursuant to paragraph (f) of this section, may be revised or modified by the authorized officer upon determination that:
 1. Modification or revision of such terms and conditions is necessary to comply with the requirements of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq*) or applicable State or Federal law.
 2. Terms and conditions contained herein are no longer needed to comply with the requirements of applicable State or Federal law.
- f. The holder agrees to operate and maintain the facilities and use the authorized easements in accordance with the attached operation and maintenance plan contained in Exhibit B.

7. Emergency Repairs.

- a. Except for emergency repairs required to protect the environment, property of the United States, or public health and safety, the holder may not use materials on National Forest System lands outside the easement prior to obtaining written authorization and paying for the materials to be used. The holder's use of material within the easement is limited to maintenance of the water conveyance system facility.
- b. If the water conveyance system facilities authorized by this easement are allowed to deteriorate to the point of threatening persons or property, and the holder, after notification by the grantor, refuses to perform the repairs and maintenance required to remove the threat to persons or property, the grantor shall have the right to undertake such repair and maintenance and to assess the holder for the costs of such repair and maintenance, regardless of whether the grantor had required the holder to furnish a bond or other security.

8. Indemnification.

- a. The holder assumes all risk of loss to the authorized improvements.
- b. The holder shall indemnify, defend, and hold the United States harmless for any violations incurred under any such laws and regulations or for judgments, claims, or demands assessed against the United States in connection with the holder's use or occupancy of the property. The holder's indemnification of the United States shall include any loss by personal injury, loss of life or damage to property in connection with the occupancy or use of the property. Indemnification shall include, but is not limited to, the value of resources damaged or destroyed; the costs of restoration, cleanup, or other mitigation; fire suppression or other types of abatement costs; third party claims and judgments; and all administrative, interest, and other legal costs. This paragraph shall survive the termination or revocation of this authorization, regardless of cause.

9. Liability. The holder shall be liable for all injury, loss, or damage, including fire suppression, or other costs in connection with rehabilitation or restoration of natural resources associated with the use and occupancy authorized by this easement. Compensation shall include but not be limited to the value of resources damaged or destroyed, the costs of restoration, cleanup, or other mitigation, fire suppression or other types of abatement costs, and all administrative, legal (including attorney's fees), and other costs in connection therewith.

10. Site Restoration. The holder shall, upon termination or revocation of this easement, stabilize the site as required by the grantor. If the holder does not stabilize the site, the holder agrees to pay the costs of such stabilization if undertaken by the grantor.

The foregoing notwithstanding, this easement is granted subject to the following reservations by the grantor, for itself, its permittees, contractors, and assigns.

11. Nonexclusive Use. The grantor reserves the right to use or permit others to use the easement area, provided such use does not unreasonably interfere with the rights and privileges hereby authorized.

12. Revocation and Termination. The grantor may take action to revoke this easement pursuant to 7 CFR 1.130 through 1.151 for noncompliance with applicable statutes or regulations or the terms and conditions of this easement. This easement also may be revoked with the consent of the holder, or if the holder fails to exercise the rights and privileges authorized for any continuous period of five (5) years or more. This easement also terminates according to its terms if the holder uses the water conveyance system for any purpose other than agricultural irrigation or livestock watering.

13. Special Provisions.

A. Forest Service Representative. The District Ranger, Ruby Mountains Ranger District, is responsible for administering this easement. The holder should contact the District Ranger regarding any questions concerning the occupancy and use authorized and the provisions of this authorization.

B. Water Rights/Adjudication. Should, subsequent to the issuance of this easement, an adjudication of the water right or water system authorized by this easement establish the fact that the Holders did not have a valid water right for the use of the water or a water system which meets the requirements of this act, then coincidental with the date of the decree, this easement shall expire on its own terms based upon the failure of the permit holder to meet the requirements of this Act. Upon expiration, all right, title, and interest in and to the subject area shall revert to the United States, or its successors or assigns.

ACCEPTANCE On this _____ day of _____, 200__, I, the undersigned Holder have read, understand, and accept the terms and conditions of this easement.

ACKNOWLEDGEMENT

STATE OF _____)
) ss.
COUNTY OF _____)

On this ___ day of _____, 200__, before me, a Notary Public in and for the State of _____, personally appeared ***** that executed the within instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Notary Public for the State of _____
Residing at _____
My commission expires _____