



**USDA Forest Service
Pacific Southwest Region
Lake Tahoe Basin Management Unit**



**DECISION MEMO
For Implementation of the Sierra Nevada Yellow-Legged
Frog Habitat Restoration Project**

El Dorado County, California

DECISION:

Based on the analysis contained in this Decision Memo (DM) and associated project planning record, it is my decision to implement the Sierra Nevada Yellow-Legged Frog Habitat Restoration Project on the Lake Tahoe Basin Management Unit as described in the proposed action. My decision incorporates project design features and monitoring as contained in this DM.

The Sierra Nevada Yellow-Legged Frog Habitat Restoration Project is located in El Dorado County, California, within a series of seven high alpine lakes that are all within the Desolation Wilderness, a congressionally designated wilderness area. The identified lakes encompassing the project area include Tamarack, Cagwin, Ralston, Lucille, Margery, Jabu, and LeConte (T12N R16E and R17E). A total of 69 lake acres and 3 miles of stream are proposed for habitat restoration during the course of this project. The entire project is in California on National Forest System land within the Lake Tahoe Basin Management Unit (LTBMU).

Project implementation will include a combination of gill netting and electrofishing to remove introduced brook and rainbow trout from the seven identified lakes (Figure 1). No chemicals will be used during the course of this project. It is projected that it will take three years to eradicate introduced trout from each lake and its associated streams. Monitoring will occur at each individual lake for an additional two years post-project implementation once an initial level of zero fish is captured. Monitoring will ensure introduced trout are eradicated from each of the seven lakes in the project area. Table 1 outlines the projected timelines to accomplish the project.

The key considerations I used in making my decision include:

- The project meets the purpose and need and addresses site-specific resource concerns by employing project design features as described in this DM (pp. 6-7).
- The project is consistent with the LTBMU Land and Resource Management Plan, as amended. The Forest Plan consistency check is documented in the project planning record (section A2).
- This project was coordinated with the Tahoe Regional Planning Agency, California Department of Game and Fish (CDFG), US Fish and Wildlife Service and Lahontan Regional Water Quality Control Board. All agencies were given the opportunity to

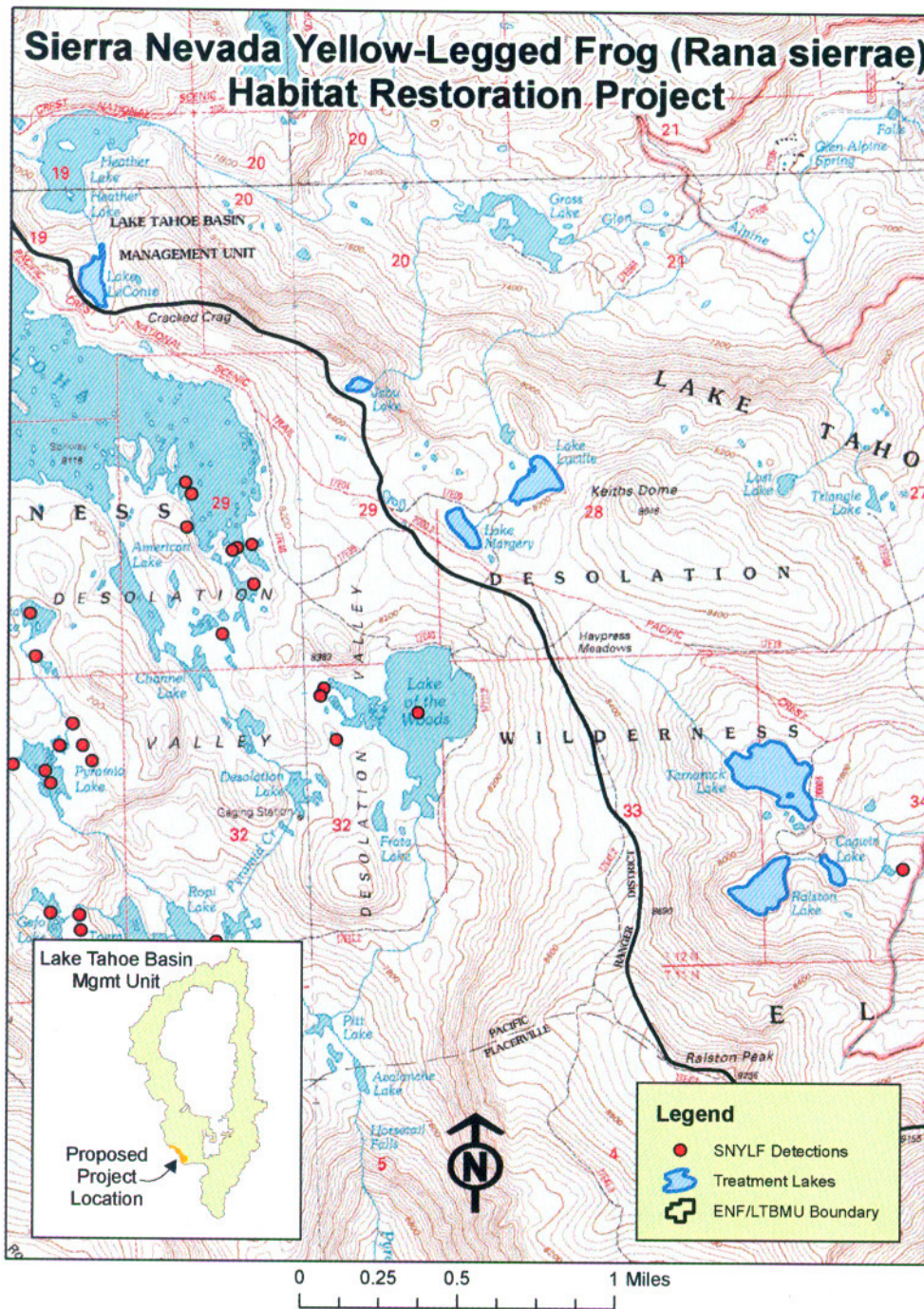
review the design of the project and provide comment. The proposed action is supported by CDFG and is consistent with the department's fishery management objectives for alpine lakes (section A1). The Washoe Tribe of Nevada and California was consulted on the proposed action and expressed full support for restoring Sierra Nevada yellow-legged frog habitat in Desolation Wilderness (section C1).

- Scoping and public involvement has been completed and is documented in the project planning record (sections A1 and C1). I received 21 responses: five letters, 15 electronic (email) and one phone message during the comment period. No significant issues were identified.
- A summary of scoping comments with our response to public input is contained in the project planning record (section C1).
- Current state of knowledge regarding Sierra Nevada yellow-legged frog conservation (section D1).
- Minimum Requirements Decisions Guidelines for management activities in wilderness areas (section D2).

Table 1. Treatment schedule for the seven lakes in the Desolation Wilderness, LTBMU.

Lake Name	Begin Implementation	Projected Completion of Eradication (zero fish captured)	Begin Monitoring	Projected Completion of Monitoring
Ralston	2008	2011	2012	2014
Tamarack	2008	2011	2012	2014
Cagwin	2008	2011	2012	2014
Margery	2009	2012	2013	2015
Lucille	2009	2012	2013	2015
Le Conte	2009	2012	2013	2015
Jabu	2009	2012	2013	2015

Figure 1. Project area map



BACKGROUND:

Sierra Nevada (mountain) yellow-legged frog (*Rana sierrae*; SNYLF) is a candidate species for listing under the Endangered Species Act (ESA). On June 24, 2007, the US Fish and Wildlife Service (FWS) published a 12-month finding on a petition to list the Sierra Nevada distinct population segment of the SNYLF (Federal Register Vol. 72, No. 121). In its finding, the FWS determined that SNYLF was warranted for listing, but precluded due to higher priority species listing determinations for other candidate species. The Sierra Nevada yellow-legged frog is listed as Sensitive on the Region 5 Regional Forester's Sensitive Species List (USDA Forest Service 1998). Because SNYLF has been extirpated from over 90% of its historic range, there is a need to restore the species habitat and prevent its range-wide extinction. To date, range-wide conservation activities for SNYLF have been accomplished in a multi-agency format involving the FWS, National Park Service (NPS), US Forest Service (USFS), CDFG and academic institutions such as the University of California, Berkeley and Sierra Nevada Aquatic Research Laboratory.

It is recognized that there are numerous factors leading to the rapid decline of this species including, but not limited to, non-native fish introduction (Kats and Ferrer, 2003), disease (Dasak et al. 2003), habitat loss (Dodd and Smith, 2003) ultraviolet (UV) radiation (Blaustein et al. 2003), climate change (Pounds et al. 1999) and pesticide use (Boone and Bridges, 2003). It is also recognized that synergisms between two or more of the above mentioned factors may be driving SNYLF declines (Blaustein and Kiesecker, 2002, Kiesecker, 2002, Ponds et al., 2006). Many of the factors causing amphibian declines are daunting because of the limited ability to reverse changes caused by these stressors over time scales relevant to current conservation efforts. However, the manual removal of non-native trout, a known predator, is reversible and has documented beneficial effects on population size and dispersal (Knapp et al. 2007, Bradford et al. 1993; Knapp 1996; Hecnar and M'Closkey 1997; and Knapp and Matthews 2000; Knapp et al. 2006).

Historically, the high-elevation habitat occupied by *R. sierrae* in the Desolation Wilderness was fishless. First attempts at stocking fish in the Desolation Wilderness occurred in lakes and streams beginning in the late 1890s. The first intensive stocking effort to develop recreational fisheries began in 1925 when the Mount Ralston Fishing Club began stocking lakes with trout using pack animals. In 1950, the CDFG assumed this responsibility. Of the 130 formerly fishless lakes located in Desolation Wilderness, 98 have been stocked with non-native salmonids. All of the large, deep lakes within the wilderness have been stocked (USDA 1998). The most common fish species stocked in the lakes have been brook trout (*Salvelinus fontinalis*), followed by rainbow (*Oncorhynchus mykiss*) and golden trout (*Oncorhynchus aguabonita*).

The seven selected lakes were chosen due to their proximity to a source population of *R. sierrae* in the Desolation Wilderness and therefore offer the greatest opportunity for population expansion by restoring habitat connectivity in this alpine ecosystem. A similar effort to remove fish on the Eldorado National Forest began in 2007 in Desolation Wilderness in lakes adjacent to the project area in Pyramid and Waca Lakes. Fish removal efforts conducted by the Eldorado National Forest will begin in 2008 in Gefo Lake. Fish removal in Pyramid, Waca and Gefo Lakes will continue on an annual basis.

Based on two years of pre-implementation monitoring in 2006 and 2007, it is presumed that Le Conte, Margery, and Jabu Lakes are already fishless as no fish were detected during those monitoring efforts (two to three gill nets set for 15 hour intervals with no fish detected). Additionally, pre-implementation monitoring suggests the remaining four lakes (Tamarack, Cagwin, Ralston, and Lucille) may not be self-sustaining due to very low (two to zero) number of young of year age class fish (juveniles) that were sampled. Therefore, it is estimated that Tamarack, Cagwin, Ralston, and Lucille will not support recreational fishing if future stocking efforts are ceased. During the 2006 and 2007 sampling efforts, brook and rainbow trout were the only species sampled. Golden trout were not sampled in any of the seven treatment lakes in 2006 and 2007 despite CDFG attempts to stock this species in Jabu Lake (Table 2). The CDFG has identified all seven lakes as Native Species Restoration Lakes and do not plan to stock any of these lakes in the future (draft 2008 Desolation Fish Management Plan; section A1).

The Tamarack, Ralston, and Cagwin Lake complex is recognized as a valuable recreational fishing source because of the proximity to the Echo Lake trailhead located by the Echo Lakes Chalet. This lake complex is approximately 3.6 miles from the above mentioned trailhead. However, Saucer and Triangle Lakes, which are both identified as self-sustaining fisheries by the CDFG, are 2.1 and 3.8 miles from the Echo Lake trailhead and have been identified as recreation fishing lakes. Lucille Lake is approximately 0.8 miles from Triangle Lake and 0.7 miles from Lost Lake, which also offers a self-sustaining fishery. Additionally, both lower and upper Echo Lakes have robust populations of introduced trout, which the public can continue to utilize as recreational fishing areas.

Project implementation has been funded by South Nevada Public Land Management Act (SNPLMA) funding through an agreement with USFWS under project title "Mountain Yellow-Legged Frog Recovery Project.. The majority of the project planning was accomplished with appropriated NFWF dollars, which will also cover the first year of project implementation.

PURPOSE AND NEED:

There is a need to expand the localized range of SNYLF in the Desolation Wilderness by reclaiming 69 acres of lake and three miles of stream habitat. The primary objective for the seven identified lakes is to provide aquatic habitat that will allow SNYLF to fulfill all required life history stages.

The decline in frog populations has resulted in the need to restore this habitat while a source population still exists adjacent to the project area. Populations extirpated or reduced as a result of fish introduction can recover to pre-disturbance after fish are removed (Knapp et al. 2007). Restoration of frog populations following fish removal has been documented in the Sierra Nevada (Vredenburg 2004, Knapp et al. 2005) and indicates that manual fish removal, as a management action, can be successfully implemented. Prior to the 1890s, alpine lakes in the Desolation Wilderness were fishless and supported viable populations of *R. sierrae*. Although no stocking has occurred in at least eight years for the majority of the project lakes, there is a need to assist in the restoration of *R. sierrae* habitat by removing an undesired predator and competitor (Table 2).

Table 2. Project area stocking record since 1950, Desolation Wilderness, LTBMU.

Waterbody	Initial Stock Year	Final Stock Year	Species Stocked
Cagwin Lake	1950	1999	Rainbow Trout
Lake Lucille	1950	1974	Brook Trout
Margery Lake	1950	2000	Brook/Rainbow Trout
Ralston Lake	1950	2000	Brook/Rainbow Trout
Tamarack Lake	1950	2000	Brook/Rainbow Trout
LeConte Lake	1951	1999	Brook/Rainbow Trout
Jabu Lake	1962	2000	Brook/Golden Trout

PROPOSED ACTION:

The LTBMU will restore ecological conditions in seven lakes in the Desolation Wilderness by manually removing non-native fish. The proposed action will allow for the natural recolonization of native *R. sierrae* from adjacent lakes where SNYLF populations currently exist. Should it be determined that further population level management is needed (i.e. reintroduction of eggs, subadults and/or adults) the CDFG will be the lead agency in taking those actions and will coordinate with the USFS.

The proposed action includes:

- Manual removal of introduced, non-native fish using monofilament gill nets will occur in Tamarack, Ralston, Cagwin, Lucille, Margery, Jabu, and Le Conte lakes and associated ponds. Gill nets will be deployed once in the fall and retrieved the following summer (immediately after snowmelt). No chemicals will be used during the course of this project. It is projected that it will take three years to eradicate introduced trout from each lake and its associated streams.
- The lightweight sinking monofilament gill nets are 120 feet long by 6 feet deep with mesh sizes varying from 0.4 to 1.5 inches. The nets will be deployed perpendicular to the shoreline. The smallest mesh sizes would be anchored to the shore, and the largest mesh sizes would be anchored in deep water. An average of 20 nets would be deployed each fall with the number of nets per lake varying with lake surface area. Dead trout will be measured, then sunk to the deepest portion of each lake.
- Manual removal of introduced trout will occur using a backpack electroshocker in all inlet and outlet streams, to the closest upstream and downstream fish barrier, associated with proposed lakes and ponds. Barriers are considered falls >0.75 meters (m) high if there is no pool at the base, falls >1.5 m if there is a pool at the base, or steep cascades higher than approximately 1.5 m. Approximately three miles of streams will be treated. No chemicals will be used during the course of this project.

- Electrofishing in upstream and downstream reaches (above and below each lake inlet and outlet) will use 3 pass depletion methods in order to track the rate of introduced fish eradication in streams. Electrofishing will occur when nets are deployed in the fall.
- Information/interpretive signs at trailheads which access the Desolation Wilderness will be installed to inform visitors about both the project and when gill nets will be deployed in the seven lakes.

PROJECT DESIGN FEATURES:

Project design features are elements of the project design that are applied in the project area. The following features were developed to reduce or avoid negative environmental effects of the proposed action on wilderness and natural resources.

- Aquatics and Botany – Decontaminate field gear (gill nets, float tubes and waders) prior to entering Tamarack, Cagwin, Ralston, Lucille, Margery, Jabu, and LeConte lakes in order to avoid possible introduction of aquatic invasive species and/or diseases. Decontamination will include rinsing equipment with 120°F water or maintained in a dry state for at least 28 days. Avoid campsites in meadows or areas that exhibit wetland herbaceous vegetation and hydrated soils. Avoid accessing treatment lakes through marshes, bogs, fens, sloughs, potholes, and mud flats and instead utilize shoreline areas where rock or sandy surfaces exist.
- Noxious Weeds – Staging areas for equipment, materials, or crews will not be sited in weed-infested areas.
- Wildlife – Although there are no sensitive terrestrial wildlife species known to occur within the project area (including established protected activity centers), an LTBMU Wildlife Biologist will be contacted if any species, nests, or evidence of breeding is detected during project implementation in order to assist with documentation of such detections.
- Recreation/Wilderness – Ensure public safety when installing gill nets in lakes by posting signs at trailheads to inform visitors about the presence of gill nets and by controlling the time of year gill nets are deployed (i.e. fall) during lower visitation time periods. Field crews will follow existing rules for camping in Desolation Wilderness.
- Heritage – Because earth disturbing activities are not proposed and through consultation of known heritage resources in the project area, it has been determined that the proposed action is an exempt undertaking under the programmatic agreement with SHPO and will not need further heritage resource survey or consultation (Stipulation II-G).

MONITORING:

This project will initiate implementation and effectiveness monitoring to ensure project success, which will include:

- Each lake will be monitored for an additional two years post-project implementation (Table 1). Monitoring will be initiated once an initial level of zero fish is captured. Monitoring will occur on a lake-by-lake basis and may vary depending on the rate of fish eradication.
- Document the number and size classes of introduced trout removed from the project area. This information will also be provided to the CDFG for their records.
- Conduct visual encounter surveys for *R. sierrae* in the project area to determine population responses to fish removal. Visual encounter surveys will be conducted in each lake once zero fish have been captured and will occur over 5 consecutive years.
- Provide the FWS and CDFG with annual reports of project implementation and post-project monitoring results.

PERMITTING:

Because the proposed action does not employ the use of chemical pesticide (rotenone or antimycin), Lahontan Regional Water Quality Control Board concerns for effects to water quality have been mitigated and a permit to implement manual fish removal is not needed. A yearly fish sampling permit will need to be acquired from CDFG by LTBMU Fisheries Biologist staff.

REASONS FOR CATEGORICALLY EXCLUDING THE PROPOSED ACTION:

CEQ regulations allow Federal agencies to exclude from documentation in an environmental assessment (EA) or environmental impact statement (EIS) categories of actions that do not individually have a significant effect on the human environment, based on the agency's experience and knowledge. I have determined that this proposed action fits under FSH 1909.15 Chapter 31.2 (6) – "Timber stand and/or wildlife habitat improvement activities which do not include the use of herbicides or do not require more than one mile of low standard road construction."

EXTRAORDINARY CIRCUMSTANCES:

1. Federally listed threatened and endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species

The potential effects of this decision on listed wildlife, fish, and plant species have been analyzed and documented in a Biological Assessment (BA) and Biological Evaluation (BE) (section B2). The only threatened or endangered species known to occur on the LTBMU is Lahontan cutthroat trout (*Oncorhynchus clarkia henshawi*; LCT). There will be no effect to LCT as the species does not occur in or adjacent to the project area. Critical habitat has not been designated by the FWS for LCT.

On June 24, 2007 the US Fish and Wildlife Service (FWS) published a 12-month finding on a petition to list the Sierra Nevada distinct population segment of the SNYLF (Federal Register Vol. 72, No. 121). The species is currently considered a candidate species by the FWS. Conservation activities involving manual non-native fish removal by CDFG, NPS, and USFS are ongoing throughout the Sierra Nevada. This project is consistent with those conservation efforts to restore SNYLF habitat. Sierra Nevada yellow-legged frog is a Forest Service sensitive species and through analysis in the BE it has been determined that the project will have a beneficial effect.

Other Forest Service sensitive wildlife and aquatic species do not occur in the project area as described in the project record (section B2). Sensitive plants such as, *Botrychium* spp., *Bruchia bolanderi* and *Messia* spp. may occur in the project area as described in the project record (section B2). Project design features, described in this memo, are intended to minimize potential effects to sensitive species. The proposed action, including these design features, may allow for minimal impact to some individuals or habitat, however, it is determined to have no impact to any sensitive species. Effects to wildlife, aquatic and sensitive plant resources are discussed in the Wildlife and Aquatic Species BE/BA and in the Sensitive Plant BE, which are found in the project record (section B2).

2. Floodplains, Wetlands, or Municipal Watersheds

Floodplains: Executive Order 11988 is to avoid adverse impacts associated with the occupancy and modification of floodplains. Floodplains are defined by this order as, “. . . the lowland and relatively flat areas adjoining inland and coastal waters include flood prone areas of offshore islands, including at a minimum, that area subject to a one percent [100-year recurrence] or greater chance of flooding in any one year.”

The project area contains floodplains associated with streams that will have fish removal via electrofishing. This has been validated by map and site-review. Physical impacts to floodplains will not occur by electrofishing in stream habitats. This is due to crews accessing the site by foot and no alteration to the physical make-up of any floodplain will occur.

Wetlands: Executive Order 11990 is to avoid adverse impacts associated with destruction or modification of wetlands. Wetlands are defined by this order as, “areas inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or will support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.”

There are swamps, marshes, bogs, fens, sloughs, potholes, and mud flats within the project area. This has been validated by map and site review. The project area does support alpine lakes, which range from 5 – 15 acres. Lake water levels are influenced by snow pack and interconnected tributaries. Careful use of design features will ensure that no effect to wetlands will occur.

Municipal Watersheds: There are no municipal watersheds located within the project area.

3. Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation sites.

The project area is located in Desolation Wilderness, a congressionally designated Wilderness Area. It is recognized that by removing trout from Cagwin, Tamarack, Ralston, Lucille, LeConte, Jabu and Margery lakes that a recreation experience (fishing) that is accessible to hikers will be eliminated; however, recreational fishing during the peak fishing season (July – September) in which gill nets are not deployed will continue to be open to the public. Also, it is presumed that some recreationalists will find the presence of what is now considered a rare species and potentially easily seen within the wilderness after restoration efforts, a memorable wilderness experience. In addition, other lakes within close proximity of the seven treatment lakes will offer the public fishing opportunities. For example, Saucer Lake is 2.1 miles from the Echo Lake trailhead and Triangle Lake is 3.8 miles while Tamarack Lake is 3.7 miles from the Echo Lake trailhead. Upper and Lower Echo Lakes, which are immediately adjacent to the Desolation Wilderness, will continue to provide recreational fisheries as well. California Department of Fish and Game has identified such lakes as having management objectives of attaining self-sustaining fisheries (section A1).

Information/interpretive signs at trailheads that access the Desolation Wilderness will be installed to inform visitors about both the project and range-wide efforts to restore *R. sierrae* habitat.

Fish removal activities implemented during the course of this project, as well as the future desired condition of providing for *R. sierrae* habitat, will ensure that attributes defined by the 1964 Wilderness Act are protected and include naturally occurring ecosystems. The proposed action is not impeding primeval character, the absence of man's imprint, and outstanding opportunities for solitude or a primitive and unconfined recreation experience. An analysis based on the MRDG was completed and is documented in the project file (section D2).

4. Inventoried roadless areas

The project is not located in an inventoried roadless area.

5. Research Natural Areas

There are no research natural areas within the project area.

6. Native American and Alaskan Native Religious or Cultural Sites

It has been determined that the proposed action falls under exemption category Stipulation II-C for screened exempt undertaking under programmatic agreement for compliance with section 106 of the National Historic Preservation Act; "Activities that do not involve ground or surface disturbance and that do not have the potential to affect access to or use of

resources by Native Americans.” This determination is documented in the project record (section B2). Alaskan sites do not apply to the California region.

7. Archaeological Sites, or Historic Properties or Areas

It has been determined that the proposed action falls under exemption category Stipulation II-C for screened exempt undertaking under programmatic agreement for compliance with section 106 of the National Historic Preservation Act; “Activities that do not involve ground or surface disturbance and that do not have the potential to affect access to or use of resources by Native Americans.” This determination is documented in the project record (section B2).

FINDINGS REQUIRED BY OTHER LAWS:

My decision is consistent with LTBMU 1988 Land and Resource Management Plan as amended, 2004 Sierra Nevada Forest Plan Amendment and will comply with all applicable laws and regulations.

National Forest Management Act (NFMA)

This Act requires the development of long-range land and resource management plans (Plans). The Lake Tahoe Basin Management Unit Land and Resource Management Plan was approved in 1988 as required by this Act. It has been amended several times, including the 2004 Sierra Nevada Forest Plan Amendment. The amended plan provides for guidance for all natural resource management activities. The Act requires all projects and activities to be consistent with the Plan.

This proposed action is located in the Desolation Management Area. Activities associated with the proposed action are consistent with the direction provided in the Lake Tahoe Basin Management Unit Forest Plan for the Desolation Management Area.

There is no specific Forest Plan direction that applies to the management of *R. sierrae*; however, the following Forest-wide standard and guidelines do apply to this project:

- 1988 LTBMU LRMP (18. Protection and Enhancement of Threatened and Endangered and Sensitive Plant Habitat) - Modify or exclude uses not compatible with the survival of threatened or endangered species (*R. sierrae* is a candidate species found warranted by the FWS for federal listing under the ESA).

This project lies within the Desolation Wilderness Management Area, whose management is dictated by the Desolation Wilderness Management Guidelines Land Management Plan Amendment (1998). Management direction from the Desolation Wilderness Management Guidelines Land Management Plan Amendment includes:

- To provide for the long term protection and preservation of the area’s wilderness character under the principle of non-degradation (pg 1-3).

- To manage the area using the minimum tool, equipment, or structure necessary to successfully and safely accomplish the objective (pg 1-4).
- To manage the wilderness as a total unit and to coordinate management direction across administrative boundaries (pg 1-4).
- To provide an environment where the forces of natural selection and survival rather than human action determine distribution, number and interaction of indigenous wildlife species (pg 1-5).
- To provide protection for known populations and aid recovery in areas of previous habitation, of federally listed or endangered species and their habitat, so long as the action is for correcting an undesirable condition resulting from human activity or authorized uses (pg 1-5).
- To provide outstanding opportunities for visitors to experience solitude and to participate in primitive and unconfined types of recreation activities that are consistent with preservation of wilderness character and that depend upon a wilderness setting (pg 1-5).
- The Eldorado National Forest and the Lake Tahoe Basin Management Unit are cooperating with the California Department of Fish and Game, Region 2, in determining the lakes and species to be stocked within Desolation (pg 1-9).
- All existing sensitive wildlife will receive full protection at current population levels or better (pg viii).

USDA Forest Service: Agency Direction for Species Conservation

The Sierra Nevada yellow-legged frog is listed as Sensitive on the Region 5 Regional Forester's Sensitive Species List (USDA Forest Service 1998). The USDA Forest Service Manual (FSM 2670.32) includes the following direction for Sensitive Species:

- Assist States in achieving their goals for conservation of endemic species.
- Establish management objectives in cooperation with the States when a project on National Forest System lands may have a significant effect on sensitive species population numbers or distribution. Establish objectives for Federal candidate species, in cooperation with the USFWS and the States.

The proposed action is consistent with CDFG goals and objectives for restoring and developing waters for native amphibians, as outlined in the draft 2008 Desolation Fish Management Plan. The proposed action is consistent with the International Association of Fish and Wildlife Agencies, "Policies and Guidelines for Fish and Wildlife in National Forest and Bureau of Land Management Wilderness", which states management activities will emphasize the protection of natural processes.

Policies and Guidelines for Fish and Wildlife Management in National Forest and Bureau of Land Management Wilderness

Management direction from the Policies and Guidelines for Fish and Wildlife Management in National Forest and Bureau of Land Management Wilderness (USDA et al. 2006) provides:

- To prevent Federal listing, manage and conserve indigenous species that could become threatened or endangered.
- Threatened and endangered species may be transplanted into previously occupied habitat within wilderness.
- Gill netting, battery-operated electrofishing, and other standard techniques of population sampling that would involve uses generally prohibited under Section 4 (c) of the Wilderness Act will be considered and may be authorized by the Federal administering agency through application of the Minimum Requirements Decisions Guidelines as outlined in Section E., General Policy.

Minimum Requirements Decision Guidelines

The Minimum Requirements Decisions Guidelines (MDRG) will be applied, as described in Policies and Guidelines for Fish and Wildlife Management in National Forest and Bureau of Land Management Wilderness (USDA et al. 2006). Minimum Requirements Decisions Guidelines acknowledge that actions regarding invasive species, monitoring, management of visitor use and fish and wildlife management activities should be assessed to determine if they are necessary and if so, how can they be implemented with the least impact on the wilderness resource.

In order to meet the MDRG a number of factors with regard to project implementation were considered and include:

- The proposed action utilizes manual fish removal by installing gill nets (average of 20 nets per lake) in identified treatment lakes and conducting electrofishing at each lake inlet and outlet to the first fish migration barrier. The installation and retrieval of gill nets are not classified as a motorized or mechanized activity (36 CFR 293.6). Backpack electroshockers are also not classified as a motorized or mechanized activity due to the small battery-powered nature of the device (36 CFR 293.6).
- Access to the project area will be by foot travel on existing system trails and equipment will be carried by field personnel. Furthermore, gill nets will be completely submerged and not be visible.
- Gill nets will be deployed during the fall (late September/October) months when swimming by recreationists is not occurring due to cold water temperatures and retrieved in the summer immediately following snowmelt. Field personnel will keep the number of entries to perform project implementation into the Desolation Wilderness to a minimum

(2 times per year; 3-4 days per entry). This will decrease recreation use conflicts during implementation. Conflicts with ongoing recreational fishing will be decreased by installing information/interpretive signs at trailheads which access the Desolation Wilderness. Wilderness rangers will also be informed of the project timing in order to appropriately communicate implementation activities to the public.

Through the analysis prepared in compliance with the MRDG the deployment of gill nets in the target lakes, and electrofishing associated stream reaches as described in the proposed action represents the minimum tools necessary to meet the purpose and need for this project. None of the activities proposed involve prohibited uses as defined in the Wilderness Act, Section 4(c). The gill nets are not considered permanent structures or installations since they will only be deployed seasonally during the winter for an estimated three years, involve no physical alteration of the landscape and will not be visible to the public. When gill netting deployment is completed there will be absolutely no evidence of their use.

National Strategic Plan

Nationally, national forests and other federal lands provide a variety of important habitats and many times have become primary refuges for federally threatened and endangered animals and plants. The Forest Service's National Strategic Plan identifies goals and objectives to restore, sustain and enhance forests and grasslands. The strategic plan identifies the need to develop and implement conservation strategies to conserve endangered, threatened, and other species at risk. Restoration of *R. sierrae* populations are tied to Objectives 1.4 (reduce adverse impacts from invasive and native species, pests, and diseases) and 1.5 (restore and maintain healthy watersheds and diverse habitats).

Endangered Species Act (ESA)

ESA requires analysis of potential impacts by the action agency on formally listed threatened or endangered species to ensure that a proposed action will not jeopardize their continued existence. Although *R. sierrae* currently has candidate species status it is not afforded any federal protection under ESA. Due to the proximity to a source population located in the Desolation Wilderness (Aloha-Pyramid Lake complex), the project contributes to the range wide recovery of this species. Project accomplishment status will be reported to the FWS, Sacramento, California Field Office. This information will be reported to the FWS on a yearly basis post-implementation. It is estimated that upon complete eradication of fish *R. sierrae* will reoccupy habitat in the seven lakes within 2 – 6 years.

Sensitive Species (Forest Service Manual 2670)

The manual direction requires analysis of potential impacts to sensitive species, those species for which the Regional Forester has identified population viability is a concern; the project biological review contains the sensitive species list. Potential effects have been analyzed and documented in Biological Evaluations (BE), which have been included as part of the project record. Potential impacts of the proposed action to sensitive species will not result in a trend toward federal listing or loss of viability.

Management of Wildlife and Fish in Wilderness (Forest Service Manual 2320)

The manual direction allows the Forest Service to conduct wildlife and fish habitat management in wilderness where such objectives perpetuate the wilderness resource (2323.35a and 35b). The manual direction also requires the Forest Service to “Achieve a balance of wildlife and fish with their habitat through cooperation with State agencies in management of public hunting, fishing, and trapping. Objectives for the management of wildlife and fish habitat are normally compatible with the objectives for maintaining wilderness values.”

Clean Water Act

This Act is to restore and maintain the integrity of waters. The Forest Service complies with this Act through the use of Best Management Practices (BMPs) when ground disturbing actions or the use of pesticides or herbicides are implemented. However, because this action does not employ either ground disturbing activities or chemical treatments traditional BMPs are not needed. This decision incorporates design criteria to protect water resources by utilizing measures to prevent the spread of aquatic invasive species/diseases.

Clean Air Act

Under this Act, areas of the country were designated as Class I, II, or III air sheds for Prevention of Significant Deterioration purposes. The project has no impacts to air quality as a result of implementing fish removal.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act covers the discovery and protection of historic properties (prehistoric and historic) that are excavated or discovered in federal lands. It affords lawful protection of archaeological resources and sites that are on public and Indian lands. The project has no impacts archeological resources and falls within under exemption category Stipulation II-C for screened exempt undertaking under programmatic agreement for compliance with section 106 of the National Historic Preservation Act.

National Environmental Policy Act

This Act requires public involvement and consideration of potential environmental effects. Public comment periods are a part of the public scoping process in using categorical exclusion authority during the project’s environmental analysis.

PUBLIC INVOLVEMENT:

The LTBMU listed the proposed action on the Internet web page’s Schedule of Proposed Actions (SOPA) beginning on April 1, 2008 and every quarter since. A scoping letter and project area

Plans” webpage on July 23, 2008. A featured story on the project proposal was published in the Tahoe Daily Tribune on August 19, 2008. The project also received additional media coverage by the Associated Press and National Public Radio.

Responses received were both supportive and negative (section C1). Negative responses were clearly focused on the desire to continue to manage these seven lakes as non-native fisheries. The project design (as coordinated with CDFG) takes into account this sentiment by recognizing that other alpine lakes in Desolation Wilderness adjacent to the project area will continue to be managed for recreational fisheries. Saucer and Triangle Lakes, which are both identified as self-sustaining fisheries by the CDFG, are 2.1 and 3.8 miles from the Echo Lake trail head and have been identified as recreation fishing lakes. Lucille Lake is approximately 0.8 miles from Triangle Lake and 0.7 miles from Lost Lake, which also offers a self-sustaining fishery. Additionally, both lower and upper Echo Lakes have robust populations of introduced trout, which the public can continue to utilize as recreational fishing areas.

The proposed action is supported by CDFG and is consistent with the department’s fishery management objectives for alpine lakes (section A1). The Washoe Tribe of Nevada and California were consulted on the proposed action. Through the scoping process the Washoe Tribe expressed full support for restoring Sierra Nevada yellow-legged frog habitat in Desolation Wilderness (section C1).

IMPLEMENTATION DATE:

Project implementation is scheduled to begin in the fall of 2008 in Ralston, Tamarack and Cagwin Lakes (Table 1). Implementation will be initiated in Lucille, Margery, Jabu, and LeConte in 2009. It is expected that the project will take three years to eradicate introduced trout from each lake and its associated streams.

ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES:

This decision is not subject to appeal pursuant to 36 CFR Part 215.12(f) as it is a decision “for actions that have been categorically excluded from documentation in an EA or EIS in FSH 1909.15, Chapter 30, section 31.”

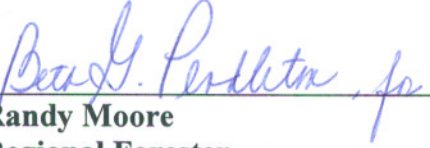
CONTACT PERSON:

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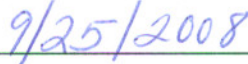
SIGNATURE AND DATE:

I have concluded that this decision may be categorically excluded from documentation in an environmental impact statement or environmental assessment as it is within one of the categories identified by the U.S. Department of Agriculture in 7 CFR part 1b.3 or one of the categories identified by the Chief of the Forest Service in Forest Service Handbook (FSH) 1909.15 sections 31.12 or 31.2. My decision concludes that no extraordinary circumstances exist related to the proposed action that may result in a significant individual or cumulative effect on the human environment, and that the decision is not subject to appeal.

My conclusion is based on information presented in this document and the entirety of the project file.



Randy Moore
Regional Forester
Pacific Southwest Region



Date