CEQA FINDINGS OF FACT

and

STATEMENT OF OVERRIDING CONSIDERATIONS

of the

CALIFORNIA DEPARTMENT OF FISH AND GAME

For the

PAIUTE CUTTHROAT TROUT RESTORATION PROJECT

MARCH 15, 2010

I. INTRODUCTION

The California Environmental Quality Act (Public Resources Code sections 21000, et seq.) (CEQA) and the CEQA Guidelines (California Code of Regulations, title 14, sections 15000, et seq.) state that if it has been determined that a project may or will have significant impacts on the environment, an Environmental Impact Report (EIR) must be prepared.

The Department of Fish and Game (CDFG), as state lead agency, in cooperation with the United States Fish and Wildlife Service (USFWS), as the federal lead agency, prepared a joint Environmental Impact Statement /Environmental Impact Report (Final EIS/EIR or EIS/EIR) for the Paiute Cutthroat Trout Restoration Project. The United States Forest Service (USFS), Humboldt-Toiyabe National Forest (HTNF) serves as a cooperating agency for the project. The EIS/EIR (State Clearinghouse No. 2002052136) consists of the February 2010 Final EIS/EIR and the February 2010 Responses to Comments. These findings, as well as the accompanying Statement of Overriding Considerations have been prepared in accordance with CEQA and the CEQA Guidelines. The purpose of these findings is to satisfy the requirements of Sections 15090, 15091, 15092, 15093, and 15097 of the CEQA Guidelines, in connection with the approval of the Paiute Cutthroat Trout Restoration Project. The USFWS will take separate, appropriate actions to ensure compliance with the National Environmental Policy Act, 42 U.S.C. section 4321, et seq. (NEPA).

Before project approval, an EIR must be certified pursuant to Section 15090 of the CEQA Guidelines. Prior to approving a project for which an EIR has been certified, and for which the EIR identifies one or more significant environmental impacts, the approving agency must make one or more of the following findings, accompanied by a brief explanation of the rationale, pursuant to Section 15091 of the CEQA Guidelines, for each identified significant impact:

- Changes or alterations have been required in, or incorporated into, such project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency, or can and should be adopted by such other agency.

- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the environmental impact report.

Section 15092 of the CEQA Guidelines states that after consideration of an EIR, and in conjunction with the Section 15091 findings identified above, the lead agency may

decide whether or how to approve or carry out the project. The lead agency may approve a project with unavoidable adverse environmental effects only when specific economic, legal, social, technological, or other considerations outweigh those effects. Section 15093 requires the lead agency to document and substantiate any such determination in a "statement of overriding considerations" as a part of the record.

II. PROJECT DESCRIPTION

A. Project Location

Silver King Creek, downstream from Llewellyn Falls to Silver King Canyon in Alpine County, is the native range of the Paiute cutthroat trout (*Oncorhynchus clarkii seleniris*), one of the rarest trout sub-species (EIS/EIR, Chapter 2.1). Silver King Creek is a tributary of the East Fork Carson River, which drains into the Lahontan Basin. Silver King Creek's headwaters are located approximately 9,600 feet above mean sea level (msl) and the creek flows in a northerly direction through three distinct valleys where it meets the East Fork Carson River. The total length of the creek is fourteen miles with an average gradient of 4.1 percent and a minimum gradient of 1.6 percent.

B. Project Summary

After considering the environmental analysis in the EIS/EIR for the Paiute Cutthroat Trout Restoration Project and the alternatives to the proposed project, public comments, and other information provided by interested state, local, and federal agencies with which CDFG coordinated and consulted. CDFG staff recommended to its Director that a project be approved to restore Paiute cutthroat trout, a native sub-species, to its entire historic range through a multi-year chemical treatment of Silver King Creek and its upper tributaries, from Llewellyn Falls down to the confluence with Snodgrass Creek. The method would involve the use of liquid rotenone formulation CFT Legumine™ at a concentration ranging from 0.5 to 1.0 parts per million (ppm) and the use of potassium permanganate to neutralize the rotenone.

The project area, located within the Silver King Creek Watershed, includes the proposed treatment area, the neutralization area, and the area downstream of the neutralization station up to a thirty-minute travel time, and downstream of the neutralization zone where potassium permanganate could result in purple or brown discoloration up to two miles downstream of the thirty-minute station. The Agencies would apply rotenone formulation and potassium permanganate into Silver King Creek and associated tributaries between Llewellyn Falls and Snodgrass Creek, located downstream of Silver King Canyon. Tributaries would include Tamarack Lake Creek, an unnamed tributary, Tamarack Creek, and Coyote Valley Creek downstream of natural barriers. The Agencies would also treat the downstream reaches of tributary springs that may harbor fish including those near Llewellyn Falls and at an unnamed tributary downstream of Tamarack Creek.

The Agencies are completing ongoing biological monitoring in the study area. Amphibian surveys are completed annually and would be completed prior to treatment. If Sierra Nevada yellow-legged frog and/or Yosemite toad are found, adults and tadpoles would be removed from waters to be treated, to the extent practicable, and relocated into suitable waters out of the project area but within the drainage. The Agencies would determine suitable waters for relocation.

The Agencies would also continue benthic macroinvertebrate population monitoring as part of the project. The sampling is required by the Lahontan Regional Water Quality Control Board (Water Board) to evaluate Silver King Creek's response to treatment and follows the protocols established in the Silver King Creek Monitoring Program proposal submitted to the Water Board (See EIS/EIR Appendix E, Aquatic Invertebrate Interagency Monitoring Plan).

A portion of the project area between Llewellyn Falls and Tamarack Lake Creek is currently closed to fishing pursuant to regulations adopted by the California Fish and Game Commission. Prior to the treatment, signs would be posted at trailheads and other strategic places to inform recreational users of areas to avoid during the treatment as well as areas where potable water can be accessed. Additional signs identifying the areas closed to fishing would be posted. This information would be provided by the USFS Carson Ranger District office prior to treatment.

Although originally under consideration, Tamarack Lake is no longer part of the project, as it has been deemed fishless based upon extensive sampling of the lake and its inlet tributaries. Tamarack Lake will continue to be monitored with appropriate sampling techniques to ensure its continued fishless status.

The features of this project are described below. This project is essentially Alternative 2 in the EIS/EIR (See EIS/EIR, Chapters 1.3, 2.3, and 3.2.2).

MODIFIED ALTERNATIVE 2

Treatment
Miles of stream: 11.0 miles (Alternative 2: 6 miles of mainstem Silver King Creek and 5 miles of associated tributary streams)
Timing of Chemical Application: Mid-August to mid-September 2010, 2011, and 2012 (if necessary) (Alternative 2: Mid-August to mid-September 2010, 2011, and 2012 (if necessary)).

Type of Treatment
Agent: CFT Legumine™ (liquid)
Estimated rotenone amount-streams: approximately 20 gallons annually (Alternative 2: 20 gallons)
Estimated number of drip stations: 15 to 17 (Alternative 2)

Stream treatment assumptions: 10 to 25 cubic feet per second total streamflow; drip stations every 1 to 2 hours travel time on streams running from 4 to 7 hours (Alternative 2: Drip stations duration 4 to 6 hours)

Access and staging
Primary staging locations: Little Antelope Pack Station, Connells Cow Camp (Admin site), Snodgrass Creek (neutralization)
Stream staging locations: Indicated on Figure 3-1 of the EIS/EIR
Staging area: <2 acres
CDFG access routes to streams and springs: General access would be by pack stock and foot traffic along established trails.

Fossil-fueled Equipment (hours of use)
Generators for volumetric augers and potassium permanganate monitors: 48 hours

Neutralization
Preferred method is neutralize rotenone using potassium permanganate dispensed by volumetric augers at concentration ranging from 2 to 4 ppm and monitored at a 30-minute stream travel time station for a target residual concentration ranging from 0.5 to 1.0 ppm. Sentinel fish will be used to verify that complete neutralization has occurred.

Restocking of Paiute Cutthroat Trout in Silver King Creek Post-Treatment
Paiute cutthroat trout would be restocked in Silver King Creek as soon the stream and its tributaries are verified as fishless as a result of the treatment. Restocking from upstream donor populations would follow guidance outlined in the EIS/EIR and the USFWS Biological Opinion.

After reviewing and considering the information contained in the EIS/EIR, including but not limited to the public comments received, and in conjunction with making these findings herein, CDFG hereby approves the above-described Modified Alternative 2.

C. Project Objectives

The primary objective of the project is to:

- Establish the Paiute cutthroat trout as the only salmonid fish species in Silver King Creek for the purpose of preventing hybridization with other salmonids.

The secondary objectives of the project are to:

- Prevent Paiute cutthroat trout from going extinct;
- Increase the probability of long-term viability and reduce threats from genetic bottlenecking and stochastic events;
- Facilitate the eventual removal of Paiute cutthroat trout from the federal threatened species list;

- Use a method that is technically feasible to implement;
- Comply with applicable laws;
- Protect public health and safety; and
- Minimize environmental impacts

The objective of the project is to establish Paiute cutthroat trout as the only salmonid fish species in Silver King Creek for the purpose of preventing hybridization with other salmonids. This is an important and necessary step in preventing Paiute cutthroat trout from going extinct and conserving the sub-species and restoring it to a level that would allow it to be removed from the federal threatened species list. To accomplish this objective, the Agencies would remove all non-native trout from the project area prior to restocking with putative pure Paiute cutthroat trout.

Paiute cutthroat trout are currently found upstream of Llewellyn Falls; however, easy public access between areas downstream and upstream of Llewellyn Falls could result in an unauthorized transplant of hybridized fish to areas above the falls where Paiute cutthroat trout are currently found in its genetically putative pure form (see Figure 1-1). Therefore, the Agencies are proposing to eradicate non-native trout within the historical range of Paiute cutthroat trout from areas downstream of Llewellyn Falls and to restock Paiute cutthroat trout, expanding its range to a series of six impassible fish barriers in Silver King Canyon and associated tributaries and increasing its population. These barriers, the two highest being eight and ten feet high, would geographically isolate Paiute cutthroat trout from other trout species and greatly reduce the likelihood of an illegal introduction.

The purpose and need for the project is to restore Paiute cutthroat trout to its historic range as stated in the USFWS 2004 Revised Recovery Plan for the Paiute Cutthroat Trout (*Oncorhynchus clarki seleniris*) (Revised Recovery Plan), and thereby satisfy one critical component of the Revised Recovery Plan for delisting the sub-species. The project would make Paiute cutthroat trout the only trout species in Silver King Creek above Silver King Canyon. By expanding the populations and range of the sub-species, the project would also increase the probability of long-term viability and reduce threats from genetic bottlenecking and stochastic events.

Currently, populations of Paiute cutthroat trout are isolated in headwater tributaries that are not biologically connected so they can co-mingle to increase diversity. If wild populations have limited genetic diversity they can lack adaptability to varying environmental conditions.

The increase in habitat as result of the project would make available to the Paiute cutthroat trout the full habitat in which the sub-species evolved and the optimal habitat for its recovery. The size and complexity of the habitat would allow for more capability to escape high flows resulting from unusual flow events. Additionally, forest fires present a threat to the Paiute cutthroat trout. Recently large fires have burned up to the watershed boundary, and if a fire moves into the watershed all of the impacts associated with forest fires and resultant sedimentation could occur. The increased habitat and range

expansion would provide a greater security against the aquatic ecosystem impacts resulting from forest fires.

D. Discretionary Approvals

CDFG's discretionary approvals associated with the project are the following:

- Certification of the EIS/EIR for the Paiute Cutthroat Trout Restoration Project
- Approval of the project

Discretionary approvals of other agencies may be required or obtained for the project. They are identified in Chapter 1 of the EIS/EIR and may include the following:

Agency	**Permits/Approvals/Consultations**
U.S Fish and Wildlife Service	Record of Decision stating EIS/EIR compliance with National Environmental Policy Act requirements, Section 7 ESA consultation for threatened and endangered species intra-Service Biological Opinion
U.S. Forest Service, Humboldt – Toiyabe National Forest	Record of Decision stating EIS/EIR compliance with National Environmental Policy Act requirements, issuance of Minimum Tools analysis, issuance of a Special Use Permit, and Pesticide Use Permit
Lahontan Regional Water Quality Control Board	NPDES permit and monitoring plan
California Fish and Game Commission	Trout angling regulation changes;
California Department of Pesticide Regulation/Alpine County Agricultural Commissioner	Coordination with DPR and Plumas County Agricultural Commissioner regarding compliance with pesticide use laws and FIFRA

III. PROJECT BACKGROUND AND HISTORY

Silver King Creek, downstream from Llewellyn Falls to Silver King Canyon in Alpine County, is the native range of the Paiute cutthroat trout, one of the rarest trout sub-species (EIS/EIR, Chapter 2.1). Indigenous only to Silver King Creek, Paiute cutthroat trout were listed as threatened under ESA on July 16, 1975 (EIS/EIR, Chapter 1.1). Out-of-basin (referring to the Silver King Creek Watershed) populations of Paiute cutthroat trout have been established by the USFWS and CDFG in several California streams including the North Fork of Cottonwood Creek and Cabin Creek in the Inyo National Forest (Mono

County), Sharktooth Creek (Fresno County), and Stairway Creek (Madera County) in the Sierra National Forest.

Hybridization with non-native trout is the primary threat to Paiute cutthroat trout (EIS/EIR, Chapter 1.1). When interbred with Lahontan cutthroat or rainbow trout, Paiute cutthroat trout tend to lose their distinctiveness through hybridization (EIS/EIR, Chapter 1.1). The fish in the reach between Llewellyn Falls and Silver King Canyon are a genetic mixture of introduced rainbow, Lahontan cutthroat, golden trout, and native Paiute cutthroat trout.

A. Conservation Planning

At the time Paiute cutthroat trout was listed under ESA, non-native trout were considered a threat to the Paiute cutthroat trout. When Paiute cutthroat trout were classified as threatened, a 4(d) rule was issued to facilitate management between CDFG and the USFWS. As described above, through efforts completed by CDFG, five small isolated populations of putative pure Paiute cutthroat trout have been established outside of its native range. These populations are and will continue to be at a high risk of extinction due to the small size of the population and limited habitat occupied by the sub-species.

In 1994, CDFG prepared a programmatic EIR entitled "Rotenone Use for Fisheries Management" to assess potential impacts of CDFG fisheries management programs and to outline best management practices to minimize environmental effects.
To further recovery of Paiute cutthroat trout, the USFWS published the Revised Recovery Plan for Paiute cutthroat trout. Criteria for delisting Paiute cutthroat trout as set forth in the Revised Recovery Plan include:

- Removal of all non-native trout in Silver King Creek and its tributaries from downstream of Llewellyn Falls to the fish barriers in Silver King Canyon;
- Restoration of a viable population to all historic habitat in Silver King Creek and its tributaries from Llewellyn Falls to the impassable barriers in Silver King Canyon;
- Maintenance of Paiute cutthroat trout in all occupied streams;
- Maintenance of out-of-basin populations as refugia; and
- Development of a long-term conservation plan and agreement.

B. Past Restoration Efforts in Silver King Creek

The Agencies have conducted numerous rotenone treatments in the Silver King Creek Watershed; however, the Agencies have not previously attempted eradication of non-native trout in the proposed project area. Previously treated areas are depicted on Figure 5.1-1 (See EIS/EIR, Chapter 5.1). The lower reaches of Four Mile Canyon Creek were treated with rotenone from 1991 through 1993. Corral Valley Creek was treated with rotenone in 1964 and 1977. Coyote Valley Creek was treated with rotenone in 1964, 1977, and 1987 through 1988. Silver King Creek above Llewellyn Falls was treated in 1964, 1976, and 1991 through 1993. As a result, Paiute cutthroat trout have been

successfully reintroduced to all these streams. Population monitoring verified with genetic testing concluded that these previous efforts have been successful in eliminating non-native trout. Genetic study results indicate Paiute cutthroat trout in areas above Llewellyn Falls and in Corral Valley and Coyote Valley creeks are not hybridized with rainbow trout.

CDFG and HTNF originally proposed to restore Paiute cutthroat trout in the project area in 2003–2004. CDFG completed an Initial Study and filed a CEQA Mitigated Negative Declaration on May 29, 2002 and a Notice of Determination on April 10, 2003. Public meetings were held on April 26, 2002; April 11, 2003; and April 30, 2004.

Because the project would have occurred on National Forest Service land, HTNF prepared an Environmental Assessment (EA) under NEPA in July 2002, followed by a Decision Notice and Finding of No Significant Impact (FONSI) in 2004. HTNF also prepared a Biological Assessment pursuant to Section 7 under ESA with USFWS and a Biological Evaluation addressing potential effects on listed species. USFWS issued a Biological Opinion on April 4, 2003.

CDFG also applied to the Water Board for a National Pollutant Discharge Elimination System (NPDES) permit to apply rotenone in Silver King Creek. The State Water Resources Control Board (SWRCB) granted an NPDES permit on July 6, 2005.

Before the rotenone application began, Californians for Alternatives to Toxics, et al., filed actions in federal and state courts to halt the project. On August 19, 2005, the Sacramento Superior Court declined to issue a temporary restraining order against implementation of the SWRCB permit. However, on August 31, 2005, the U.S. District Court granted a temporary restraining order against the project. On September 1, 2005, the U.S. District Court granted a preliminary injunction against the project.

On September 30, 2005, CDFG requested the SWRCB to rescind its NPDES permit, and on October 20, 2005, the SWRCB rescinded the permit.

The California Fish and Game Commission (CFGC) had initially closed the area between Llewellyn Falls and Silver King Canyon prior to the planned treatment in 2005. To protect putative pure Paiute cutthroat trout above Llewellyn Falls, and in response to judicial decisions regarding the SWRCB permit, CFGC closed the area to fishing for an additional ninety days on an emergency basis. This closure was modified to the current closure of Silver King Creek and tributaries from Llewellyn Falls downstream to Tamarack Lake Creek based on findings adopted by CFGC in May 2006. Silver King Creek remains closed to fishing above Llewellyn Falls since the successful establishment of Paiute cutthroat trout in this area in 1993. In addition, CFGC closed Corral Valley Creek and Coyote Valley Creek to fishing to protect putative pure Paiute cutthroat trout populations established in these tributaries. Chapter 5.6 of the EIS/EIR presents a detailed description of recent closure decisions.

In 2006, the USFWS proposed to restore Paiute cutthroat trout in the project area and published a Notice of Intent (NOI) to prepare an EIS in the Federal Register (FR 71 32125 – 32126) on June 2, 2006. The NOI, included with the EIS/EIR, requested public comment on the proposal from June 2 through July 3, 2006. In addition, as part of the public involvement process, the USFWS held a public scoping meeting in Markleeville on June 19, 2006. Approximately nine citizens attended the meeting. USFWS used the comments raised at the meeting to develop a list of issues requiring further analysis in the EIS/EIR (See EIS/EIR, Appendix A and Chapter 2.5).

CDFG prepared a CEQA Notice of Preparation (NOP) on September 16, 2008. The NOP opened the public scoping period and invited the public to offer comments on the proposed Action until October 31, 2008 (See EIS/EIR, Appendix A). One public scoping meeting for the EIR was held in Alpine County at Turtle Rock Park in Markleeville, California on October 7, 2008. Press releases were issued to local radio, television, and print media outlets to notify the public of the meeting. CDFG sent approximately 210 direct mail notices to potentially interested parties including residents, various federal, state, and local agencies along with existing CDFG, Water Board and USFS contacts. USFWS and CDFG presented information on the project and its potential effects and the role the public plays in the environmental review process. Participants were encouraged to provide verbal comments at the scoping meetings or to provide written comments. The Agencies met with the Alpine County Board of Supervisors on October 21, 2008, and November 18, 2008, and the Alpine Watershed Group on January 13, 2009, to discuss the proposed Action.

The Agencies have actively consulted and coordinated with federal, state, and local agencies, and tribes that have an interest in the proposed Action or could have a role in reviewing and/or providing permits or other approvals for various aspects of the Paiute Cutthroat Trout Restoration Project. The Agencies have met with representatives of various federal, state, and local agencies regarding the respective interests of these agencies. The USFWS and CDFG posted the Draft EIS/EIR on their respective websites and mailed copies to interested agencies, individuals, and organizations:

After the Draft EIS/EIR was published, USFWS and CDFG sent the Notice of Availability (NOA)/Notice of Completion (NOC) and a newsletter to the project mailing list, the Markleeville Library, and local newspapers including the Tahoe Tribune, Douglas County Record Courier, Reno Gazette.

The NOC was filed with the Office of Planning and Research, State Clearinghouse, and the USFWS sent copies to the U.S. Environmental Protection Agency (USEPA) and published the NOA in the Federal Register, beginning a 45-day public comment period. The Agencies received approximately 600 comments during the public comment period. Copies of the comment letters and responses to those comments are contained in Appendix F of the EIS/EIR.

IV. PROJECT BENEFITS

CDFG finds that the project will would result in cumulative beneficial effects to Paiute cutthroat trout by expanding its range and population. Significant threats to the existing populations of Paiute cutthroat trout include, but are not limited to hybridization and a high risk of extinction resulting from the small size of the existing populations and limited amount of habitat occupied by the sub-species. By more than doubling the habitat and restoring the Paiute cutthroat trout to its entire historic range the interconnectivity of isolated populations within the Silver King Creek basin will be restored. Expansion of existing habitat will reduce threats from genetic bottlenecking and stochastic environmental events (e.g., forest fires and floods).

Currently, populations of Paiute cutthroat trout are isolated in headwater tributaries that are not biologically connected so they can co-mingle to increase diversity. If wild populations have limited genetic diversity they can lack adaptability to varying environmental conditions.

The increase in habitat as result of the project would make available to the Paiute cutthroat trout the full habitat in which the sub-species evolved and the optimal habitat for its recovery. The size and complexity of the habitat would allow for more capability to escape high flows resulting from unusual flow events. Additionally, forest fires present a threat to the Paiute cutthroat trout. Recently large fires have burned up to the watershed boundary, and if a fire moves into the watershed all of the impacts associated with forest fires and resultant sedimentation could occur. The increased habitat and range expansion would provide a greater security against the aquatic ecosystem impacts resulting from forest fires.

The restoration of Paiute cutthroat trout to its historic range through the removal of non-native hybridized trout will implement Priority Actions 1.1 and 1.2 as outlined in the Revised Recovery Plan for the Paiute cutthroat trout. Priority Action 1.1 is described as the removal of non-native fish from Silver King Creek from Llewellyn Falls to the barriers in Silver King Creek Canyon. The purpose of the Revised Recovery Plan is to delineate reasonable actions required to recover and/or protect listed species. Restoration of Paiute cutthroat trout to its historic range will accomplish a critical and necessary step towards the eventual goal of recovery and delisting the sub-species from the threatened species list.

There are no long term economic impacts and no significant economic impacts associated with the project. The project could result in short-term local economic impacts, primarily to the local pack station that services the Carson-Iceberg Wilderness. In addition, the project will benefit the state and region by restoring one of the rarest sub-species of trout in North America and protecting a heritage fish. Native species represent heritage resources that future generations should be able to enjoy. Most of the native heritage trout species in California have been subjected to reduction of habitat through competition or hybridization with introduced species. These species of fish are of ecological, educational, historical, recreational, esthetic, economic, and scientific value to

the people of this state, and the conservation, protection, and enhancement of these species and their habitat is of statewide concern. This project will reduce threats to the Paiute cutthroat trout and its recovery will ensure that it will be preserved for current and future generations.

V. RECORD OF PROCEEDINGS

In accordance with Public Resources Code section 21167.6, subdivision (e), the record of proceedings for CDFG's decision on the project includes the following documents:

- CDFG Initial Study (May 28, 2002)
- CDFG Mitigated Negative Declaration (May 29, 2002)
- CDFG Notice of Determination (April 10, 2003)
- USFS-HTNF Environmental Assessment (July 2002)
- USFS-HTNF Decision Notice and Finding of No Significant Impact (April 30, 2004)
- USFS-HTNF Biological Assessment (February 14, 2003)
- USFS-HTNF Biological Evaluation (March 19, 2004)
- USFWS Biological Opinion (April 4, 2003)
- SWRCB NPDES permit (July 6, 2005)
- The record of proceedings before the Lahontan Regional Water Quality Control Board (September 8, 2004)
- The record of proceedings before the State Water Resources Control Board (2005)
- The record of proceedings before the Sacramento Superior Court in *Californians for Alternatives to Toxics, et al. v. State Water Resources Control Board, et al.* (Case No. 05CS01160)
- The record of proceedings before the United States District Court for the Eastern District of California in *Californians for Alternatives to Toxics, et al. v. Troyer, et al.* (Case No.: 2:05-CV-01633-FCD-KJM)
- USFWS Notice of Intent for the Paiute Cutthroat Trout Restoration Project (June 2, 2006)
- CDFG Notice of Preparation for the Paiute Cutthroat Trout Restoration Project (September 16, 2008)
- Paiute Cutthroat Trout Restoration Project Draft EIS/EIR (March 2009) and all appendices thereto
- Paiute Cutthroat Trout Restoration Project Final EIS/EIR (March 2010) and all appendices thereto
- All comments submitted by public agencies and members of the public during the public comment period on the Draft EIS/EIR
- All comments and correspondence submitted to CDFG with respect to the project, in addition to timely comments on the Draft EIS/EIR
- Responses to Comments on the Draft EIS/EIR
- Documents cited or referenced in the Draft EIS/EIR and Final EIS/EIR

- The Mitigation Monitoring and Reporting Program for the project
- All findings adopted by CDFG for the project
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the project prepared by CDFG or consultants to CDFG with respect to CDFG's compliance with CEQA and with respect to CDFG's action on the project
- Any recordings of public meetings, public workshops, and public hearings held by CDFG in connection with the project
- Any other materials required for the record of proceedings by Public Resources Code section 21167.6, subdivision (e).

The official custodian of the record is Manager, Paiute Cutthroat Trout Restoration Project, 1701 Nimbus Road, Rancho Cordova, CA 95670.

VI. FINDINGS REQUIRED BY CEQA

Public Resources Code section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such project." Section 21002 further states that the procedures required by CEQA "are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects." Section 21002 also states that, "in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof."

The mandate and principles enunciated in Section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required. For each significant environmental effect identified in an EIR for a proposed project, the approving agency must issue a written finding reaching one or more of three permissible conclusions. The first of such findings is that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. In their application to the project, the adopted mitigation measures are among the "changes or alterations" referenced in this finding. Other "changes and alterations" are discussed herein. The second permissible finding is that such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. The third potential finding is that specific economic, legal, social, technological, or other considerations, make infeasible the mitigation measures or project alternatives identified in the final EIR. (CEQA Guidelines, Section 15091.)

As explained elsewhere in these findings, "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors. The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. (*Sequoyah Hills Homeowner Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715.) Moreover, "'feasibility' under CEQA encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors." (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417.)

For purposes of these findings, the term "avoid" refers to the effectiveness of one or more mitigation measures to reduce an otherwise significant effect to a less than significant level. By contrast, the term "substantially lessen" refers to the effectiveness of such measure or measures to substantially reduce the severity of a significant effect, but not to reduce that effect to a less than significant level.

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. In the process of adopting mitigation, CDFG has made a determination regarding whether the mitigation proposed in the EIS/EIR is "feasible." In some cases, modifications may have been made to the mitigation measures proposed in the EIS/EIR to update, clarify, streamline, correct, or revise those measures. Where that has occurred, these are discussed herein.

With respect to a project for which significant environmental impacts are not avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons the agency found the project's benefits outweigh its unavoidable adverse environmental effects. In the process of considering the EIS/EIR for certification, CDFG has recognized that impact avoidance is not possible in all instances. To the extent that significant adverse environmental impacts will not be reduced to a less-than-significant level with adopted mitigation, CDFG has found that specific biological and ecological considerations support approval of the project.

VII. MITIGATION MONITORING AND REPORTING PLAN

A Mitigation Monitoring and Reporting Plan (MMRP) has been prepared for the project and is adopted with these findings. CDFG will use the MMRP to track compliance with applicable project mitigation measures. The MMRP will remain available for public review during the compliance period. The MMRP is attached to these findings as Exhibit A and is approved in conjunction with certification of the EIS/EIR and adoption of these Findings.

Pursuant to Section 15091, subdivision (d) of the CEQA Guidelines, all feasible mitigation measures that avoid or substantially lessen the significant effects of the project and that are adopted by CDFG become binding on the project at the time of approval as requirements of the project, as applicable.

VIII. SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The Draft EIS/EIR identified two significant and potentially significant environmental effects (or impacts) that may be caused in whole or in part by the project. Neither of these significant effects can be fully avoided or substantially lessened through the adoption of feasible mitigation measures and may thus be significant and unavoidable. For reasons set forth in Section XII, *infra*, however, CDFG has determined that overriding biological and ecological, social, and other considerations outweigh the significant, unavoidable effects of the project. CDFG's findings with respect to the project's significant effects and mitigation measures are set forth in the EIS/EIR and these Findings.

These findings do not attempt to describe the full analysis of each environmental impact contained in the EIS/EIR. Instead, these findings provide a summary description of each impact, describe the applicable mitigation measures identified in the EIS/EIR and adopted by CDFG, and state CDFG's findings on the significance of each impact after imposition of the adopted mitigation measures. A full explanation of these environmental findings and conclusions can be found in the EIS/EIR and associated record (described herein), and these findings hereby incorporate by reference the discussion and analysis in the EIS/EIR and the record as a whole supporting CDFG's determinations regarding the impacts of the project and the mitigation measures designed to address those impacts. In making these findings, CDFG adopts and incorporates in these findings the determinations and conclusions of the EIS/EIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

The following general findings are made by CDFG:

- For all impacts identified as less-than-significant in the EIS/EIR, the less-than-significant impact determination is hereby confirmed by CDFG based on the evidence and analysis provided in the record.

- For all adopted mitigation measures, CDFG hereby directs that the stated mitigation measure shall be incorporated into the MMRP. CDFG finds that each such measure is appropriate and feasible, and will lessen the impact to some degree.

In analyzing the merits of the proposed project and alternatives, and making project recommendations to CDFG's Director, staff may have recommended modifications to the original wording of some of the mitigation measures presented in the EIS/EIR. To the

extent this was done, the modifications are for the purposes of clarification of the measure and implementation. These clarifications are not considered to constitute "significant new information," as that term is defined in CEQA, unless the EIS/EIR is changed in a way that deprives the public of a meaningful opportunity to comment on a substantial environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. CEQA Guidelines, Section 15088.5, subdivision (a) provides that "significant new information" requiring recirculation include, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
(2) A substantial increase in the severity of an environmental impact result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
(4) The draft EIR was so fundamentally flawed and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

(See *Mountain Lion Coalition v. Fish and Game Comm.* (1989) 214 Cal.App.3d 1043.)

CDFG hereby determines based on substantial evidence in the record that the changes to the mitigation measure serve to clarify, amplify, or make insignificant modifications to an adequate EIR, and do not trigger any of these thresholds. Therefore, recirculation is not required because of these changes.

CDFG has adopted all of the mitigation measures identified in the Findings Table and also in the MMRP which is attached as Exhibit B. Some of the measures identified in the Findings Table are also within the jurisdiction and control of other agencies. To the extent of any of the mitigations are within the jurisdiction of other agencies, CDFG finds those agencies can and should implement those measures within their jurisdiction and control. (See CEQA Guidelines, § 15091(a)(2).)

IX. PROJECT ALTERNATIVES

A. Introduction

Pursuant to Section 15126.6 of the CEQA Guidelines, the EIS/EIR considered a total of three alternatives to the project. The EIS/EIR examines the proposed project and two alternatives: Alternative 1 (No Project/No Action) and Alternative 3 (Non-Chemical Mechanical Removal). These project alternatives are described in detail in Chapter 3 of the EIS/EIR. Brief descriptions are provided here and in Subsection E below.

- Proposed Project (Alternative 2): Restore Paiute cutthroat trout, a native sub-species, to its entire historic range through a multi-year chemical treatment of Silver King Creek and its upper tributaries, from Llewellyn Falls down to the confluence with Snodgrass Creek. The method would use the liquid rotenone formulation CFT Legumine™ at a concentration ranging from 0.5 to 1.0 parts per million (ppm) and use potassium permanganate to neutralize the rotenone.

- No Project/No Action (Alternative 1): This option involves continuing the current stream and fishery management practices involving Paiute cutthroat trout in Silver King Creek into the foreseeable future. Under the No Action alternative, the Paiute cutthroat trout Revised Recovery Plan would not be implemented.

- Non-Chemical Mechanical Removal (Alternative 3): This alternative would use non-chemical means to remove non-native trout from the project area. It includes a combination of electrofishing, gill netting, seining, and other physical methods to remove fish from Silver King Creek and its tributaries, springs, and Tamarack Lake. The Combined Physical Removal alternative would not employ rotenone or any other chemical treatment.

B. Feasibility of Alternatives

Section 15126.6, subdivision (f) of the CEQA Guidelines provides a discussion of the factors that can be taken into account in determining the feasibility of alternatives. These factors include:

- Failure to achieve the basic objectives of the project;
- Failure to avoid or substantially lessen significant environmental effects of the project;
- Site suitability;
- Economic viability;
- Availability of infrastructure;
- General plan consistency;
- Limitations of other plans or regulations;
- Jurisdictional boundaries;
- Ability of the project proponent to reasonably acquire, control, or otherwise have access to an alternative site; and
- Alternatives for which effects cannot be reasonably ascertained and whose implementation is remote and speculative.

Based on impacts identified in the EIS/EIR, and other reasons documented below, CDFG finds that adoption and implementation of the project as approved is the most desirable, feasible, and appropriate action and rejects the other alternatives as either less desirable, infeasible, or both based on consideration of the relevant factors identified herein. A summary of each alternative and its relative characteristics, and documentation of CDFG's findings in support of rejecting the alternative as less desirable or infeasible are

provided below. Both Alternative 1 and Alternative 3 are infeasible within the meaning of Section 15126.6, subdivision (f) of the CEQA Guidelines.

C. Impacts Not Substantially Lessened by Mitigation in the EIS/EIR

As discussed in Chapters 5.1 and 5.3 of the EIS/EIR, the project will have water quality impacts that will result in the following significant and unavoidable impacts, even with the implementation of all feasible mitigation:

- **Impact AR-1:** The project could result in the loss of individual benthic macroinvertebrate taxa, potentially including rare (unquantified) and/or unidentified species endemic to Silver King Creek. (See, e.g., EIS/EIR, Chapters 5.1 and 5.4.)

- **Impact HEH-1:** The project will result in temporary changes in species composition in non-target aquatic invertebrate communities. (See, e.g., EIS/EIR, Chapters 5.3 and 5.4.)

D. Scope of Necessary Findings and Considerations for Project Alternatives

These findings address whether the various alternatives lessen or avoid any of the significant unavoidable impacts associated with the project and consider the feasibility of each alternative. Under CEQA, "(f)easible means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (CEQA Guidelines, Section 15364.) The concept of feasibility permits agency decision makers to consider the extent to which an alternative is able to meet some or all of a project's objectives. In addition, the definition of feasibility encompasses desirability to the extent an agency's determination of infeasibility represents a reasonable balancing of competing economic, environmental, social, and technological factors.

CDFG finds that the range of alternatives studied in the EIS/EIR reflects a reasonable attempt to identify and evaluate various types of alternatives that would potentially be capable of reducing the proposed project's environmental effects, while accomplishing most but not all of the project objectives. CDFG finds that the alternatives analysis is sufficient to inform CDFG's Director and the public regarding the tradeoffs between the degree to which alternatives to the proposed project could reduce environmental impacts and the corresponding degree to which the alternatives would hinder CDFG's ability to achieve its project objectives.

CDFG is free to reject any alternative it considers undesirable from a policy standpoint, provided that such a decision reflects a reasonable balancing of various "economic, social, and other factors." (*City of Del Mar v. City of San Diego*, (1982) 133 Cal.App.3d 401, 417; Public Resources Code section 21002.1.) As the California Supreme Court has emphasized, "[t]he wisdom of approving…any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the

local officials and its constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced." (*Citizens of Goleta Valley v. Board of Supervisors*, (1990) 52 Cal.3d 553, 576 ("*Goleta II*").)

The broad definition of feasibility under CEQA impliedly recognizes the inevitable need to allow agency decision makers to consider the policy ramifications of their actions, while requiring them generally to strive to find means to avoid or reduce significant environmental damage where reasonably possible. However, CEQA does not require CDFG to limit its consideration of infeasibility to narrow definitions. Instead, feasibility encompasses policy considerations beyond merely quantitative economic calculations: "feasibility involves a balancing of various 'economic, environmental, social, and technological factors.'" (*City of Del Mar*, 133 Cal.App 3d at 418.)

The *City of Del Mar* case stands for the proposition that, "feasibility" under CEQA encompasses "desirability" to the extent desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors. (133 Cal.App 3d at p. 417.) Accordingly, when a reviewing court considers an agency's determination that alternatives are "infeasible" the proper inquiry is whether the agency reasonably balanced competing environmental, economic, social, and technological considerations, and has supported is decision with substantial evidence.

Further, the agency's findings on the feasibility of the alternatives may be supported by any "substantial evidence in the record." (Public Resources Code, § 21081.5; CEQA Guidelines, §15091, subd. (b); *Sequoyah Hills Homeowners Association v. City of Oakland*, (1993) 23 Cal.App 4th 704, 715 (in assessing the feasibility of alternatives in findings, "the agency may receive such information in whatever form it desires").)

E. Description of Project Alternatives

1. Proposed Project (Alternative 2)

Description: The project would restore Paiute cutthroat trout, a native sub-species, to its entire historic range through a multi-year chemical treatment of Silver King Creek and its upper tributaries, from Llewellyn Falls down to the confluence with Snodgrass Creek. The method would use the liquid rotenone formulation CFT Legumine™ at a concentration ranging from 0.5 to 1.0 ppm and then neutralizing the rotenone using potassium permanganate.

Ability to Reduce Significant Unavoidable Impacts: The project would not avoid any of the significant and unavoidable impacts identified in the EIS/EIR. Therefore, the project will have water quality impacts that will result in the following significant unavoidable impacts:

- **Impact AR-1:** The proposed Action could result in the loss of individual benthic macroinvertebrate taxa, potentially including rare (unquantified) and/or

unidentified species endemic to Silver King Creek. (See, e.g., EIS/EIR, Chapters 5.1 and 5.4.)

- **Impact HEH-1:** The proposed Action will result in temporary changes in species composition in non-target aquatic invertebrate communities. (See, e.g., EIS/EIR, Chapters 5.3 and 5.4.)

Ability to Meet Project Objectives: This alternative will meet all of the following objectives:

- Establish the Paiute cutthroat trout as the only salmonid fish species in Silver King Creek for the purpose of preventing hybridization with other salmonids.
- Prevent Paiute cutthroat trout from going extinct by removing non-native hybridized trout, thus significantly reducing the potential for movement of fish into the currently occupied habitat;
- Increase the probability of long-term viability and reduce threats from genetic bottlenecking and stochastic events by increasing the available habitat for the sub-species and providing greater refuge from catastrophic environmental events;
- Facilitate the eventual removal of Paiute cutthroat trout from the federal threatened species list by restoring Paiute cutthroat trout to its entire historic range and reducing of threats to its continued existence;
- Use a method that is technically feasible to implement;
- Comply with applicable laws;
- Protect public health and safety; and
- Minimize environmental impacts.

Feasibility: Use of liquid formulations of rotenone (CFT Legumine™) is a proven and feasible method for eradicating fish in both standing and flowing water. Registered for use as a piscicide with the USEPA and the California Department of Pesticide Regulation (CDPR), CFT Legumine™ has undergone extensive laboratory and field-testing and has explicit application directions. The formulation consists of a rotenone extract dissolved in solvents and emulsifiers, which help it mix into water and disperse both horizontally and vertically. Successful fish eradication projects have been carried out by CDFG throughout the state (e.g., Silver King Creek upstream of Llewellyn Falls, Wolf Creek, and Silver Creek) using drip station and neutralization techniques described in Chapter 3 of the EIS/EIR. Improved neutralization application technology and detection equipment and methodologies have reduced the variability of and chances of error in the project. Additionally, Alternative 2 would require fifty personnel for one week for two to three years versus Alternative 3 that would require a minimum of eleven personnel for a minimum of seventy-two days for a minimum of ten years.

For the foregoing reasons, CDFG accepts and approves this project alternative.

2. No Project/No Action (Alternative 1)

Description: This option involves continuing the current stream and fishery management practices involving Paiute cutthroat trout in Silver King Creek into the foreseeable future. Under the No Action alternative, the Revised Recovery Plan would not be implemented.

Ability to Reduce Significant Unavoidable Impacts: The No Project/No Action Alternative would avoid all of the project's significant unavoidable impacts. However, the No Project/No Action would not carry out the projects primary objective of removal on non-native hybridized trout from the Paiute cutthroat trout's historic range and thus would not prevent the existing threats of hybridization, genetic bottlenecking, and stochastic environmental events (e.g., forest fires and floods).

Ability to Meet Project Objectives: This alternative will fail to meet any of the project objectives.

Feasibility: The No Project/No Action Alternative would fail to meet the most basic objective of the project, which is to restore Paiute cutthroat trout to its entire historic range. It also would fail to reduce the treats from hybridization, genetic bottlenecking and stochastic environmental events (e.g., forest fires and floods). Under the No Action alternative, the Paiute cutthroat trout Revised Recovery Plan Priority 1 Action would not be implemented.

For the foregoing reasons, CDFG rejects this project alternative.

3. Non-Chemical Mechanical Removal (Alternative 3)

Description: This alternative would use of non-chemical means to remove non-native trout from the project area. It includes a combination of electrofishing, gill netting, seining, and other physical methods to remove fish from Silver King Creek and its tributaries. The Combined Physical Removal alternative would not employ rotenone or any other chemical treatment.

Ability to Reduce Significant Unavoidable Impacts:
Alternative 3 would avoid all of the project's significant unavoidable impacts. However, the uncertainty of success and the long-term implementation (a minimum of ten years) would delay achievement or fail entirely to achieve the objectives of the project and ultimately fail to carryout the Revised Recovery Plan Priority 1 Action.

Ability to Meet Project Objectives: This alternative may not meet the objectives in a timely manner, and its overall efficacy is uncertain due to habitat complexity and capture efficiency of juvenile fish that would recruit back into the population of non-native hybridized trout.

Feasibility: Electrofishing to capture all fish would be more intensive (multiple passes until no fish are captured, higher electrical power) than typical population assessment surveys. Factors such as habitat complexity, fish cover, fish behavior, and susceptibility

to the electric field would challenge technicians and make verification of complete removal difficult and uncertain. Using physical removal techniques would require many years of work (ten or more years), longer than Alternative 2 to achieve removal of all non-native trout. Alternative 3 anticipated eleven workers working for a minimum of seventy-two days per year to cover the entire eleven miles of stream reaches occupied by non-native hybridized fish. These efforts could fail to capture small fish and could be confounded by trout moving into the project area from untreated upstream areas. Physical disturbance of the streambed would occur as workers conduct sufficient passes to complete the procedure.

For the foregoing reasons, CDFG rejects this project alternative.

F. Environmentally Superior Alternative – Alternative 2

Description: See discussion of Alternative 2 above.

Basis for Identifying Environmentally Superior Alternative: Through the environmental review process, Alternative 2 was ultimately identified as the Environmentally Superior Alternative.

Alternative 1 (No Action) would be the environmentally superior alternative because it would avoid all of the potentially significant impacts of the proposed Action. However, the No Action alternative would fail to establish the Paiute cutthroat trout as the only salmonid fish species in Silver King Creek for the purpose of preventing hybridization with other salmonids. The No Action alternative would not implement the Revised Recovery Plan, nor would it restore Paiute cutthroat trout to its full historic range or protect it reduce its vulnerability to stochastic events, further hybridization, and possible extinction. While the significant impacts of the proposed Action would be completely avoided in the short term under the No Action alternative, the No Action would fail to protect and preserve the sub-species. (See EIS/EIR, Chapter 5.10 and Table 5.10-1.)

Alternative 3 (Combined Physical Removal) would result in significant, direct physical impacts, would be very difficult to implement and potentially infeasible, and may not be effective in the long term. (See EIS/EIR, Chapter 5.10 and Table 5.10-1.)

Ability to Reduce Significant Unavoidable Impacts: See discussion of Alternative 2 above.

Ability to Meet Project Objectives: See discussion of Alternative 2 above.

Feasibility: See discussion of Alternative 2 above.

For the foregoing reasons, CDFG finds that the Alternative 2 is the environmentally superior alternative accepts and approves this project alternative.

G. Differences between the Project and the 2005 Proposed Project:

- Increased planning.
- CDFG has worked with the local government in Alpine County through presentations and outreach (EIS/EIR Chapter 1.4).
- Better cooperation with the Lahontan Regional Water Quality Control Board.
- More public input and outreach.
- CDFG and USFWS have jointly held public meetings and workshops to get the input and involvement of the local public in the program and listening to their ideas and concerns on this and the past environmental analysis.
- CDFG staff has conducted ten years of surveys of the streams, looking at the areas to determine where additional information is needed.
- CDFG and the USFWS publicly examined a wider range of options for eliminating non-native hybridized fish than was considered in the past.
- Removal of Tamarack Lake from the scope of the project as the lake has been deemed fishless as a result of intensive sampling over the last nine years.
- CDFG proposes an accurate method for dispensing potassium permanganate and monitoring to ensure that neutralization is complete and that no rotenone or inactive ingredients in the formulation escape the treatment area.
- Improved monitoring of potassium permanganate will give near real time feedback for the operation and its implementation.
- CDFG and the USFWS are proposing to set aside benthic macroinvertebrates refugias as non-treatment areas and if possible using lower concentrations of formulated product that has be shown in laboratory studies to be less toxic to sensitive benthic macroinvertebrates.
- The rotenone formulation to be used (CFT Legumine™) does not contain *pipeornyl butoxide* (pbo), a substance that has been shown to increase toxicity in benthic macroinvertebrates.

X. CUMULATIVE IMPACTS

The EIS/EIR included cumulative impacts analyses for the proposed project and alternatives. The cumulative impacts for the alternatives are identified in the following Chapters of the EIS/EIR:

- Chapter 6.5.4.1 (Aquatic Resources)
- Chapter 6.5.4.2 (Terrestrial Resources)
- Chapter 6.5.4.3 (Human and Ecological Exposure)
- Chapter 6.5.4.4 (Greenhouse Gases and Climate Change)
- Chapter 6.5.4.5 (Water Quality)
- Chapter 6.5.4.6 (Recreation)
- Chapter 6.5.4.7 (Wilderness Values and Management)
- Chapter 6.5.4.8 (Economic Resources)
- Chapter 6.5.4.9 (Environmental Justice)

XI. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The project would use energy resources in the process of transporting staff, equipment, and supplies to and from the trailhead leading to the project area and to operate the auger for dispensing the neutralization agent. In addition, the treatment area would be closed to fishing during treatment and restocking. Potential reopening would be subject to future California Fish and Game Commission decisions that are not a part of the project. Closure of the area would constitute an irretrievable commitment of a recreational resource to non-recreational use because it represents an opportunity forgone for a substantial period during which the resource cannot be used.

XII. STATEMENT OF OVERRIDING CONSIDERATIONS

As set forth in the preceding sections, CDFG's approval of the project will result in significant adverse environmental effects that cannot be avoided even with the adoption of all feasible mitigation measures, and there are no feasible project alternatives which would mitigate or substantially lessen the impacts. Despite the occurrence of these effects, however, CDFG approves the project because, in its view, biological and ecological, social, and other benefits of the project will render the significant and unavoidable impacts acceptable.

In making this Statement of Overriding Considerations in support of the findings of fact and the project, CDFG has considered information contained in the Final EIS/EIR for the project as well as the public testimony and record of proceedings in which the project was considered. CDFG has balanced the project's benefits against the significant and unavoidable adverse impacts identified in the Final EIS/EIR. CDFG hereby determines that the project's benefits outweigh the significant and unavoidable unmitigated adverse impacts.

A. Significant and Unavoidable Impacts

Modified Alternative 2:

The project will have water quality impacts that will result in the following significant and unavoidable impacts, even with the implementation of all feasible mitigation:

- **Impact AR-1:** The proposed Action could result in the loss of individual benthic macroinvertebrate taxa, potentially including rare (unquantified) and/or unidentified species endemic to Silver King Creek. (See, e.g., EIS/EIR, Chapters 5.1 and 5.4.)

- **Impact HEH-1:** The proposed Action will result in temporary changes in species composition in non-target aquatic invertebrate communities. (See, e.g., EIS/EIR, Chapters 5.3 and 5.4.)

B. Specific Findings

Project Changes to Avoid or Reduce Impacts: Changes or alterations have been made in the project, which mitigate to the most feasible degree the significant environmental effects of the project, as identified in the Final EIS/EIR. These take several forms: (1) the project has undergone changes and alterations in design between the original project proposal and alternatives and the final proposed project and alternatives, as analyzed in the Final EIS/EIR; and (2) the project is modified by the final adopted mitigation measures identified in the Mitigation Monitoring and Reporting Program (Exhibit A). These changes are documented in the record for the project. The changes and alterations include, but are not limited to, the following:

- Continued monitoring of Tamarack Lake with gill nets to ensure continued fishless status. The Agencies have determined that Tamarack Lake is fishless and have removed it from the project in terms of chemical treatment. However, because of the risks that are posed by the presence of non-native trout to the Paiute cutthroat trout via hybridization, the Agencies will seek to ensure the continued fishless status of the lake.

- The project will use CFT Legumine™ (liquid rotenone), a formulation that does not contain *pipeornyl butoxide* (pbo) a substance that has been shown to increase toxicity to aquatic macroinvertebrates. In addition, this formulation has been shown not to have adverse human health concerns.

- The project will use the lowest concentration of formulated rotenone, yet still maintain efficacy to reduce impacts non-target aquatic organisms.

- The CDFG will conduct pre-project amphibian surveys, and if any are encountered they will be relocated to outside the project treatment area.

- The CDFG will identify fishless areas (tributary headwaters, springs, and seeps) that will not provide refugia for fish seeking to escape the chemical treatment and can be maintained in a fishless condition. These areas will serve as aquatic macroinvertebrate refugia for post-project recolonization. These designated non-treatment areas will be mapped (GPS) and flagged. These areas will not be chemically treated.

Final Disposition of Mitigation Measures: All feasible mitigation measures have been incorporated into the project by way of adoption of the Mitigation Monitoring and Reporting Program (Exhibit A), as requirements of implementation of the project.

Project Benefits Outweigh Unavoidable Impacts: The remaining unavoidable and irreversible impacts of the project are acceptable in light of biological, ecological, legal, social, technological, and other considerations set forth herein because the benefits of the project as described herein outweigh any significant and unavoidable or irreversible environmental impacts of the project.

Balancing of Competing Goals: CDFG finds it is imperative to balance competing goals in approving the project. Although CDFG has selected Alternative 2 with some modifications to the project, two significant environmental impacts remain that have not been and cannot be fully mitigated. Despite these unmitigated impacts, CDFG approves this project because of the need to meet competing concerns and/or the need to recognize biological, ecological, legal, social, technological, and other issues as factors in decision-making. Accordingly, CDFG has deemed these significant and unavoidable adverse environmental impacts acceptable because to eliminate them would unduly compromise important biological, ecological, legal, social, technological, and other goals. CDFG finds and determines, based on the Final EIS/EIR, testimony from the hearings, and other supporting information in the record, that the project will provide a positive balance of the competing goals and that the benefits to be obtained by the project outweigh the adverse environmental impacts of the project.

C. Overriding Considerations

In CDFG's judgment, the project and its benefits outweigh its significant and unavoidable effects. The following statement identifies the reasons why, in CDFG's judgment, the benefits of the project outweigh its unavoidable significant effects. Any one of these reasons is sufficient to justify approval of the project. Even if a court were to conclude that not every reason is supported by substantial evidence, CDFG would stand by its determination that each individual reason outlined herein is sufficient. The substantial evidence supporting the various benefits can be found in the preceding findings, which are incorporated by reference into this section, and in the Final EIS/EIR and other documents found in the Record of Proceedings, as defined in Section V. The benefits of the project, which outweigh the impacts of the project, include:

- The project will establish the Paiute cutthroat trout, one of the rarest sub-species of trout in North America, as the only salmonid fish species in the Silver King Watershed, its entire historic range, for the purpose of preventing hybridization with other salmonids.

- The project will benefit the state and region by restoring one of the rarest sub-species of trout in North America and protecting a heritage fish. Native species represent heritage resources that future generations should be able to enjoy. Most of the native heritage trout species in California have been subjected to reduction of habitat through competition or hybridization with introduced species. These species of fish are of ecological, educational, historical, recreational, esthetic, economic, and scientific value to the people of this state, and the conservation, protection, and enhancement of these species and their habitat is of statewide

concern. This project will reduce threats to the Paiute cutthroat trout and its recovery will ensure that it will be preserved for current and future generations.

- The project will have the effect of more than doubling the existing habitat for the Paiute cutthroat trout and re-establishing one of the rarest sub-species of trout in North America to its entire historic range. The reach of Silver King Creek between Llewellyn Falls and Silver King Canyon that will be recovered has more complexity and diversity than the existing habitat occupied by the Paiute cutthroat trout. The population estimates for the existing non-native hybridized populations downstream of Llewellyn Falls are approximately double that of the Paiute populations upstream of Llewellyn Falls. It is expected that when Paiute populations are restored to the project area that the population size will be comparable to the non-native populations currently present.

- The project will remove the principal threat to the continued existence of Paiute cutthroat trout by the eliminating sources of hybridized fish in close proximity to existing populations of the sub-species. Non-native hybridized fish are located in Silver King Creek downstream of Llewellyn Falls, within several hundred feet of the existing Paiute cutthroat trout populations upstream of Llewellyn Falls. This close proximity presents a high risk of illegal movement of non-native fish into habitat occupied by pure Paiute cutthroat trout, thus placing the existing populations at risk of extinction through hybridization. The removal of the non-native hybridized fish and expansion of the range of the Paiute cutthroat trout will effectively isolate the species in the Silver King Creek basin. The potential for movement of non-native fish into the recovered population will be greatly reduced due to inaccessibility through Silver King Canyon and the trail distance that would have to be traveled to transport fish into the recovery habitat.

- The project will reduce threats from genetic bottlenecking and stochastic environmental events (e.g., forest fires and floods) through the expansion of habitat and connectivity with other populations within the Silver King Watershed. The expansion of the Paiute cutthroat trout in habitat downstream of Llewellyn Falls will allow for biological connectivity of currently isolated populations located throughout the basin. The increase in genetic diversity that will occur as a result of the recovery of the Paiute cutthroat trout will enhance its ability to adapt and withstand possible adverse events that could affect the populations. The habitat complexity of Silver King Creek between Llewellyn Falls and Silver King Canyon is superior to the currently occupied habitat upstream of Llewellyn Falls. This complexity provides great escape cover for fish to avoid high stream flow events that occur during floods. In addition, in the event of a large forest fire in the basin, the expansion of habitat will provide greater security for the populations to withstand adverse impacts that would result from a large-scale landscape disturbance.

- The project will accomplish a critical and necessary step leading to the goal of eventually delisting the Paiute cutthroat trout from the federal Threatened Species

List. The restoration of Paiute cutthroat trout to its historic range through the removal of non-native hybridized trout will implement Priority Actions 1.1 and 1.2 as outlined in the Revised Recovery Plan for the Paiute cutthroat trout. Priority Action 1.1 is described as the removal of non-native fish from Silver King Creek from Llewellyn Falls to the barriers in Silver King Creek Canyon. The purpose of the Revised Recovery Plan is to delineate reasonable actions required to recover and/or protect listed species. Restoration of Paiute cutthroat trout to its historic range will accomplish a critical and necessary step towards the eventual goal of recovery and delisting the sub-species from the threatened species list.

- The project will maintain and extend fishless habitats in headwater habitats and lakes within the Silver King Creek watershed for the benefits of sensitive native amphibians and invertebrates. The CDFG will not restock the two lakes in the Silver King watershed. By remaining fishless the two lakes and headwater tributary streams will allow native endemic species to recover thus benefiting the wilderness through natural processes.

- The restoration of native species in the Carson-Iceberg Wilderness is a benefit and the enhancement of the genetic diversity of the Paiute cutthroat trout will allow for less management by the CDFG. This would preserve and enhance the long-term wilderness and ecological values by restoring a native species to its historic habitat.

D. Conclusion

The Final EIS/EIR was prepared pursuant to the provisions of CEQA and the CEQA Guidelines. CDFG has independently determined that the Final EIS/EIR fully and adequately addresses the impacts and mitigation measures of the project. The number of project alternatives identified and considered in the Final EIS/EIR meets the test of "reasonable" analysis and provides CDFG with important information from which to make an informed decision. Public hearings were held in Markleeville. Substantial evidence in the record from those hearings and other sources demonstrates various benefits and considerations including biological, ecological, legal, social, technological, and other benefits which would be achieved from implementation of the project. CDFG has balanced these project benefits and considerations against the significant and unavoidable and irreversible environmental risks identified in the Final EIS/EIR and has concluded that those impacts are outweighed by the project benefits. Upon balancing the environmental risk and countervailing project benefits, CDFG has concluded that the benefits that will derive from implementation of the project outweigh those environmental risks. CDFG hereby determines that the above-described project benefits override the significant and unavoidable environmental impacts of the project.

CDFG adopts the mitigation measures in the Mitigation Monitoring and Reporting Program, which is attached hereto as Exhibit B and incorporated by reference into the

project, and finds that any residual or remaining effects on the environment resulting from the project, identified as significant and unavoidable in the preceding findings of fact, are acceptable due to the benefits set forth in this Statement of Overriding Considerations.

XIII. CERTIFICATION OF THE EIS/EIR, ADOPTION OF A MITIGATION MONITORING AND REPORTING PROGRAM, ADOPTION OF FINDINGS UNDER CEQA, AND ADOPTION OF THE STATEMENT OF OVERRIDING CONSIDERATIONS

The Department finds that the Draft and Final EIS/EIR have been completed in compliance with CEQA, that the Department reviewed and considered the EIS/EIR and all information contained therein prior to approval of the proposed project, and that the Final EIR reflects the Department's independent judgment and analysis under CEQA as it relates to the Paiute Cutthroat Trout Restoration Project.

The Department hereby certifies the EIS/EIR, adopts the MMRP, adopts these findings under CEQA, and adopts this Statement of Overriding Considerations in connection with the Paiute Cutthroat Trout Restoration Project.

AS APPROVED AND ADOPTED

Signed: _____ Date: 3/15/10

John McCamman
Director

Exhibit A

Paiute Cutthroat Trout Restoration Project
Silver King Creek, Humboldt-Toiyabe National Forest
Alpine County, California

Mitigation Monitoring / Reporting Program
(MMRP)

Paiute Cutthroat Trout Restoration Project
Silver King Creek, Humboldt-Toiyabe National Forest
Alpine County, California

CEQA
Mitigation Monitoring / Reporting Program
(MMRP)

Prepared By:
California Department of Fish and Game
March 2010

This Mitigation Monitoring/Reporting Program (MMRP) has been prepared for the project described below in accordance with section 21081.6 of the California Environmental Quality Act (CEQA) and section 15097 of the CEQA guidelines.

Project Title: Paiute Cutthroat Trout Restoration Project, Silver King Creek, Humboldt-Toiyabe National Forest, Alpine County, California

CEQA Project Lead: California Department of Fish and Game (CDFG)

Project Location: Silver King Creek located in the Carson-Iceberg Wilderness in the Humboldt-Toiyabe National Forest in Alpine County, California.

Project Description: CDFG in cooperation with the U.S. Fish and Wildlife Service (USFWS) will chemically treat the area of Silver King Creek downstream of Llewellyn Falls to Silver King Canyon with the piscicide CFT-Legumine™ (rotenone). The purpose of the chemical treatment is to restore Paiute cutthroat trout to its historic range.

Introduction: Silver King Creek, downstream from Llewellyn Falls to Silver King Canyon (treatment area) is the native range of the Paiute cutthroat trout, one of the rarest trout sub-species. The treatment area currently supports a mixture of introduced rainbow, Lahontan cutthroat, golden, and native Paiute cutthroat trout. The objective of the project is to establish Paiute cutthroat trout as the only trout species in Silver King Creek for the purpose of preventing hybridization with other trout species. The purpose and need for this project is to restore Paiute cutthroat trout to its historic range as stated in the revised recovery plan (USFWS 2004), and thereby satisfy one critical Recovery Plan component for delisting the sub-species. The U.S. Forest Service (USFS) will issue CDFG a special use authorization to conduct specific activities within the Carson-Iceberg Wilderness Area. A final Environmental Impact Statement/Report (EIS/EIR) has been completed for the Paiute Cutthroat Trout Restoration Project. The EIS/EIR describes significant and unavoidable impacts and the mitigation measures associated with them. In accordance with the Water Quality Control Plan for the Lahontan Region (Basin Plan) CDFG applied for a National Pollutant Discharge Elimination System (NPDES) permit for the project from the Lahontan Regional Water Quality Control Board (LRWQCB) (LRWQCB 2010). The NPDES permit details specific water quality objectives that must be met as part of the proposed permit. Mitigation measures are categorized into seven sections: surface water monitoring, benthic macroinvertebrate resources, amphibian resources, fishery resources, wildlife resources, site safety, and reporting.

Surface Water Monitoring

In accordance with the Basin Plan, the proposed NPDES permit contains a surface water monitoring and reporting program for the project (Monitoring and Reporting Program No. R6T-2009-(Proposed) (LRWQCB 2010)).

Temperature

Water temperature will be measured and recorded whenever samples are collected for laboratory analysis.

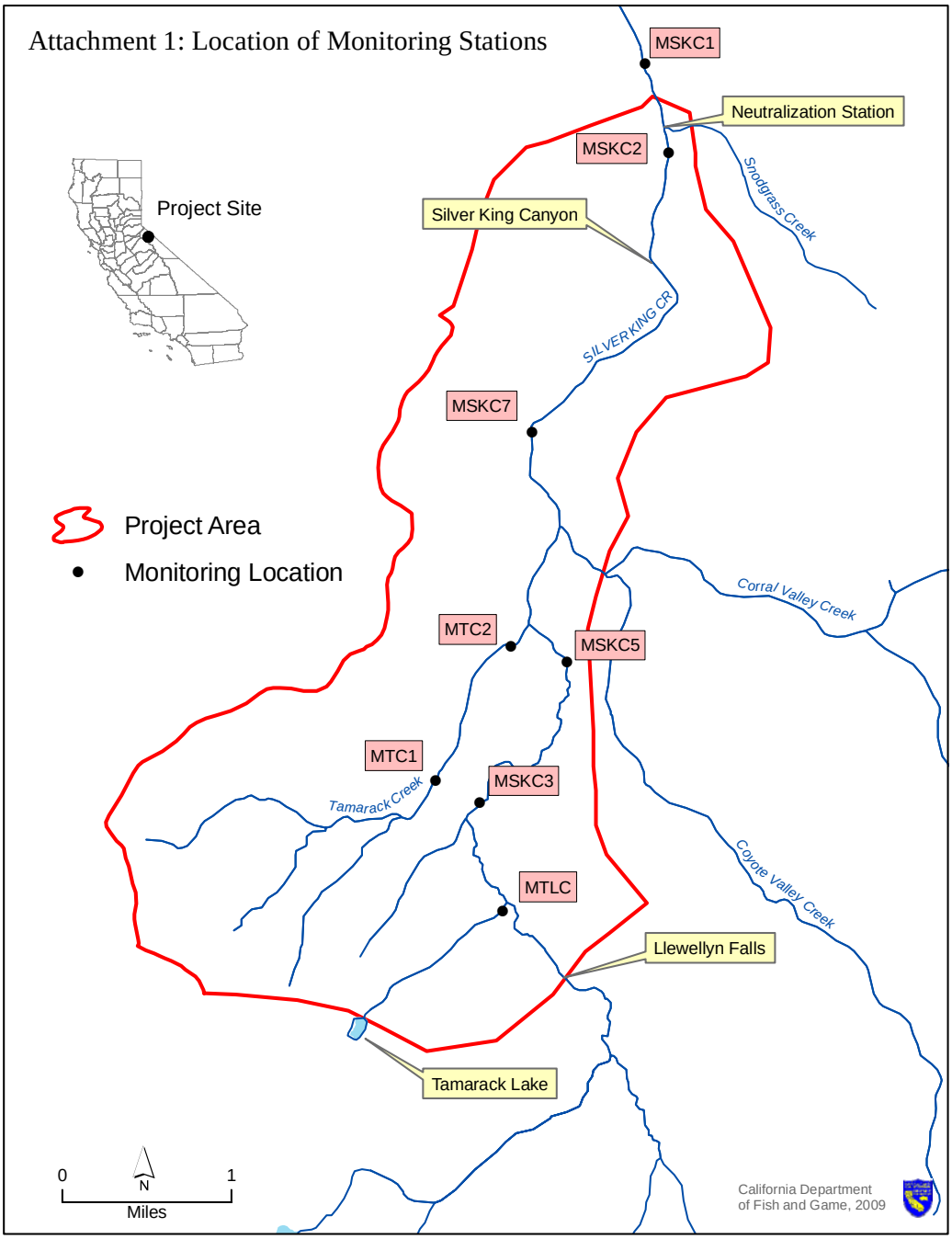
Rotenone Application and Neutralization

Rotenone will be applied to the project area at a target concentration of 0.5 to 1.0 mg/L using drip stations. Backpack sprayers will be used in backwater areas as deemed necessary. Mini-drips and gel or sand matrices may be used in seeps if the possibility exists that they provide refugia for fish trying to escape the treated areas. To contain the effects of rotenone to the project area a neutralization station will be operated just upstream of the confluence of Silver King Creek and Snodgrass Creek.

The neutralization station will consist of a generator powered auger dispensing potassium permanganate at a concentration of 2 to 4 mg/L. Potassium permanganate will oxidize rotenone during a 30-minute travel time (neutralization zone), approximately one-half mile downstream of the neutralization station. Potassium permanganate leaves a characteristic red or purple color in the stream which will not be visible for more than two miles downstream of the 30-minute water quality monitoring station (MSKC1). The water color at the two-mile mark will be visually inspected at least three times per day during daylight operations.

Sample Locations and Toxicity

Sample locations are detailed in Attachment 1: Location of Monitoring Stations. Upstream of the neutralization zone there are six water quality stations that will be monitored in accordance with the Sampling Schedule and Analysis section below. All samples will be collected using approved sampling protocols and analyzed at the Department of Fish and Game laboratory certified by the California Department of Health Services. Constituents that will be analyzed in the samples include: rotenone, rotenolone, volatile organic compounds (VOC's), semi-volatile organic compounds (SVOC's), diethylene glycol ethyl ether (DEE), and 1-methyl1-2-pyrrolidone (MP).


Attachment 1: Location of Monitoring Stations
MSKC1
Neutralization Station
MSKC2
Snodgrass Creek
Silver King Canyon
SILVER KING CR
Project Site
MSKC7
Project Area
Monitoring Location
Corral Valley Creek
MTC2
MSKC5
MTC1
MSKC3
Tamarack Creek
Coyote Valley Creek
MTLC
Llewellyn Falls
Tamarack Lake
0
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1
Miles
California Department
of Fish and Game, 2009

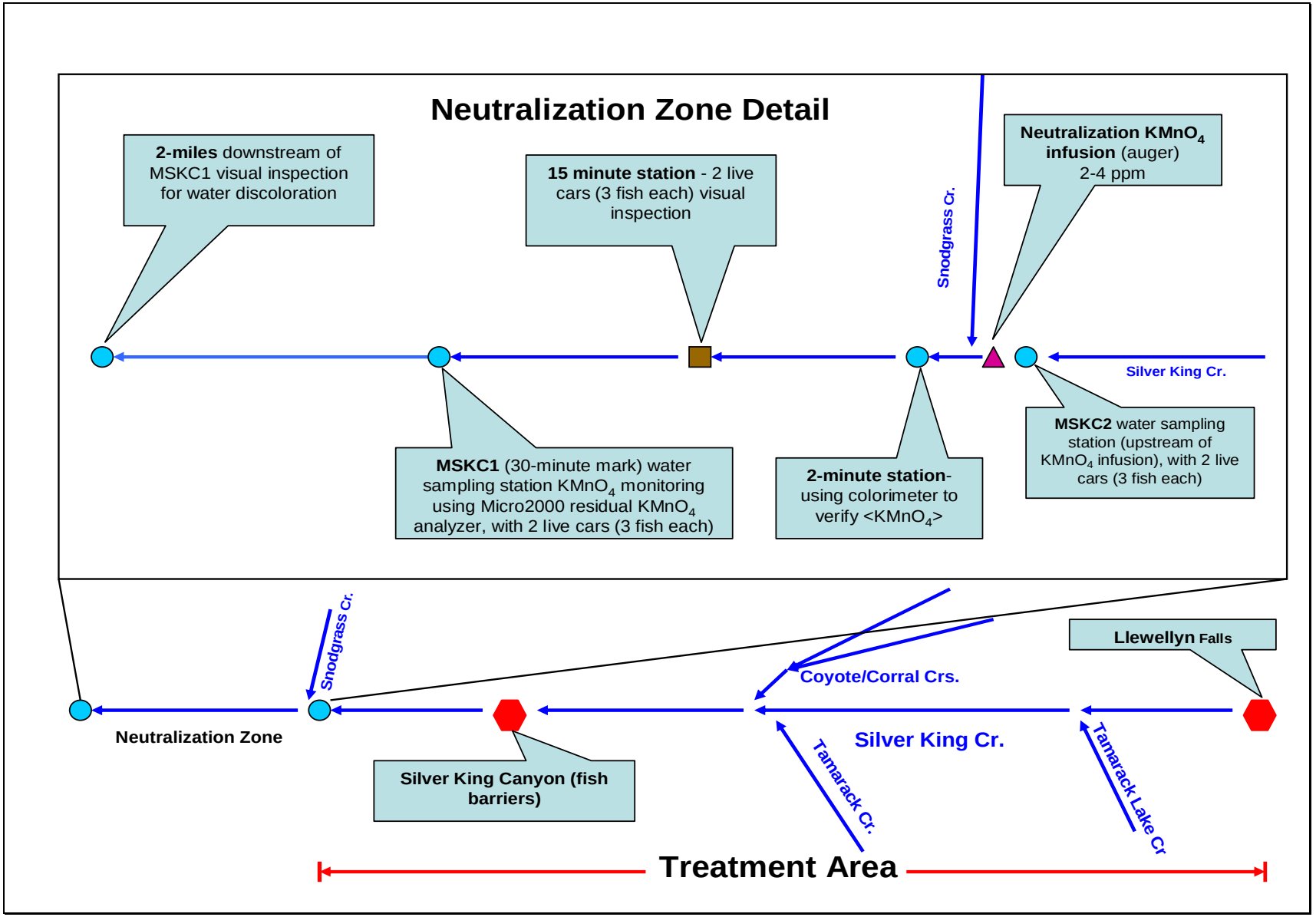

Figure 1: Silver King Creek Paiute Cutthroat Trout Restoration Project Neutralization Zone Detail

The neutralization zone will consist of the neutralization station and five monitoring sites (Figure 1: Silver King Creek Paiute Cutthroat Trout Restoration Project Neutralization Zone Detail). MSKC2 is located just upstream of the neutralization station and consists of two fish live cars that each contain three fish for monitoring rotenone toxicity. The two-minute station located downstream of the neutralization station monitors potassium permanganate concentrations using a colorimeter. A 15-minute station containing two live cars with three fish in each of them will be visually inspected to monitor the neutralization of the rotenone downstream of the neutralization station.

MSKC1 (30-minute mark) will monitor potassium permanganate concentrations using a Micro 2000 residual analyzer. Additionally, MSKC1 will have two live cars containing three fish each that will be visually inspected for any signs of rotenone toxicity.

As required in the proposed NPDES permit, After a two week period following rotenone application and neutralization no chemical residues resulting from the treatment will be at detectable levels within or downstream of the project boundaries.

Sampling Schedule and Analysis

Analysis	Site	Pre-treatment	During Treatment	Day After Treatment	Weekly Post-treatment
Rotenone & Rotenolone	MSKC1	X	every 2 hours	X	X[2]
Rotenone & Rotenolone	MSKC2	X	every 2 hours	X	
Rotenone & Rotenolone	MCKC3		Twice		
Rotenone & Rotenolone	MSKC5		Twice		
Rotenone & Rotenolone	MSKC7		Twice		
Rotenone & Rotenolone	MTLC1		Twice		
Rotenone & Rotenolone	MTC1		Twice		
Rotenone & Rotenolone	MTC2		Twice		
VOC/SVOC	MSKC1	X	Twice		X[2]
VOC/SVOC	MSKC2	X	Twice		
DEE/MP	MSKC1	X	Twice	X	X[2]
DEE/MP	MTC1	X	Twice		
DEE/MP	MTC2	X	Twice		

[2] If any chemical treatment residues are detected at MSKC1 (project boundary and point of regulatory compliance) on the day following treatment, samples shall be collected at that station and analyzed on a weekly basis until no residues are detected. All other sites are monitored for operational purposes during treatment.

Benthic Macroinvertebrate Resources

The application of rotenone will directly affect all aquatic species in Silver King Creek, including macroinvertebrates. Individual macroinvertebrate species have varying ranges of rotenone tolerance (Vinson et al. 2010, Finlayson et al. 2010). The sensitivity of individual species and life stages to rotenone appears related to their oxygen uptake process (Engstrom-Heg et al. 1978). Species that use gills to uptake oxygen are more sensitive than those that acquire oxygen through other means (Vinson and Vinson 2007). CDFG cannot rule out the possibility that a rare or endemic macroinvertebrates could be lost as a result of the project. As such, the EIS/EIR contains two significant and unavoidable impacts for macroinvertebrates.

Impact AR-1: The proposed Action could result in the loss of individual benthic macroinvertebrate taxa, potentially including rare (unquantified) and/or unidentified species endemic to Silver King Creek. (Significant and Unavoidable)

Impact HEH-1: The proposed Action will result in temporary changes in species composition in non-target aquatic invertebrate communities (Significant and Unavoidable).

CDFG has incorporated measures into the project to reduce the impact of rotenone application on macroinvertebrates. CDFG will attempt to use a lower formulated rotenone concentration and the less toxic formulation CFT-Legumine™ for rotenone applications. The entire project area will be extensively mapped following the process established in the Lake Davis Pike Eradication Project (Patterson and DeVore 2008). Following mapping of the project area seeps and springs, that may house rare or endemic species, will be labeled as protected and will not be treated unless they are deemed to contain habitat for fish trying to escape the treatment area. All areas upstream of Llewellyn Falls will remain untreated to provide a source of recolonizing macroinvertebrates for the treatment area. CDFG in cooperation with the USFWS and USFS has developed an Aquatic Invertebrate Interagency Monitoring Plan for Silver King Creek (USFS 2007). The objectives of the monitoring plan are to: 1) analyze changes in macroinvertebrate assemblages and taxa from the use of rotenone during Paiute cutthroat trout recovery activities, 2) collect and identify taxa from the Silver King Creek basin, and 3) reestablish historic collection sites in selected streams. Pre-treatment sampling was conducted as part of the monitoring plan in 2007, 2008, 2009 and will be conducted in 2010 to establish baseline criteria for the project area. Following the final year of treatment, five years of aquatic sampling will be conducted to monitor the effects of rotenone on macroinvertebrates.

Amphibian Resources

Pre-treatment amphibian surveys were conducted by CDFG in 2009. No special status amphibian species were observed in the project area. Prior to project implementation in the summer of 2010 amphibian surveys will be conducted throughout the project area. If any amphibian species are detected during pre-treatment surveys they will relocated to areas outside the treatment area as feasible.

Fishery Resources

Paiute cutthroat trout used for restocking will be captured using electrofishing techniques. Some effects to Paiute cutthroat trout are anticipated from the electrofishing portion of this project. Based on information from previous population surveys, less than 1 percent of fish captured experienced direct mortality (CDFG 2009). Restocking will be conducted pursuant to guidelines and recommendations for stocking and genetic diversity management in the Revised Recovery Plan (USFWS 2004) and recent genetic studies (Cordes et al. 2004, Finger et al. 2008). Paiute cutthroat trout used for restocking will come from genetically pure populations within the Silver King Creek watershed, namely Fly Valley Creek, Four Mile Canyon Creek, Coyote Valley Creek, Corral Valley Creek, and Upper Silver King Creek (above Llewellyn Falls) (Cordes et al. 2004). Monitoring of the Paiute cutthroat trout population will be conducted by CDFG and the USFWS as part of effectiveness monitoring for the proposed project. The entire population of Paiute cutthroat trout may be subjected to an electric field during normal population surveys.

Electrofishing guidelines will be followed during the collection phase of the project which will minimize negative effects to Paiute cutthroat trout. The guidelines require that field crews be trained in observing animals for signs of stress and shown how to adjust electrofishing equipment to minimize that stress. All electrofishing equipment operators are trained by qualified personnel to be familiar with equipment, handling, settings, maintenance, and safety. Only DC units will be used, and the equipment will be regularly maintained to ensure proper operating condition. Voltage, pulse width, and rate will be kept at minimum levels and water conductivity will be tested before electrofishing starts so the minimum levels can be determined. Due to the low settings used, shocked fish normally revive instantaneously. Fish requiring revivification will receive immediate, adequate care.

Transportation may result in some mortality to individual Paiute cutthroat trout. It is anticipated that no more than 10 mortalities would occur during transport (CDFG 1996). To reduce the potential for impact, the agencies will transport fish when stream temperatures are low enough to avoid stress. Transfers will be done using cool water tanks or carboys to avoid stress to fish from excessively high water temperatures. Transportation containers will be cooled when possible and an aerator may be used to oxygenate the water.

Stocking criteria were developed by the CDFG, USFWS, and USFS during a Threatened Trout Committee meeting in 1994. The following criteria were implemented in 1994 after the rotenone treatments in Silver King Creek between 1991-1993: 1) collect fish (Paiute cutthroat trout) from different parts of the donor stream; 2) take fish of different age classes to avoid "Founder's Effect" – 25 percent adults, 50 percent sub-adults, and 25 percent fingerlings; 3) collect 30 fish to capture 95 percent of genetic diversity or 150 fish to get 100 percent of the genetic diversity; and 4) retain at least 150 individuals in the donor population to maintain genetic diversity (CDFG1996). These criteria have been successful as populations in the donor streams (Fly Valley and Coyote Valley Creeks) and Silver King Creek in Upper Fish Valley have shown no adverse affects from stocking (CDFG 2009). Additionally, genetic diversity in the donor streams has been maintained (Cordes et al. 2004). Similar criteria will be used to restock the project area once eradication of nonnative and hybrid trout has been confirmed. Paiute cutthroat trout populations fluctuate naturally on an annual basis; therefore, exact number of Paiute cutthroat trout used to restock will vary. This project is consistent with the International Union for Conservation of Nature (IUCN) position statement on translocation of living organisms (IUCN 1998) and other recent directions in reintroduction biology (Armstrong and Seddon 2007).

Wildlife Resources

The application of rotenone to the project area will result in dead fish accumulating in portions of Silver King Creek. To reduce the amount of dead fish in the creek system, a series of block nets will be deployed to catch dead fish floating downstream. Dead fish will be removed from the nets and disposed of in accordance with the USFS special use permit for the project. Any fish not removed from with the nets will be left to decompose in the creek. The potential toxicity of rotenone treated fish to foraging wildlife was evaluated in Chapter 5.2 and Appendix C in the EIS/EIR. The analysis concluded that foraging wildlife would not be adversely affected by consuming rotenone treated fish.

Site Safety

Prior to project implementation a Site Safety and Spill Contingency Plan as well as a Spill Prevention and Response Plan a will be developed for the project. During implementation Best Management Practices (BMP's) will used to reduce the likelihood of an accident. BMP's that will be followed include: applying rotenone in accordance with product labels; rotenone applications by a licensed applicator; maintaining and implementing a Site Safety and Spill Contingency Plan and a Spill Prevention and Response Plan; and the use of proper personal protective equipment. All personnel will receive proper pesticide safety and site safety training prior to the project implementation. Prior to treatment CDFG will post signs informing the public of the project and warning the public to avoid contact with water in the project area.

Reporting

One day prior to implementation CDFG will provide a draft map of sensitive habitats identified during the mapping of the project area to the LRWQCB. The sensitive habitat areas will be labeled as “no treatment areas” on the map. By November 1st of each treatment year CDFG will supply LRWQCB with a final map identifying all sensitive habitats within the treatment area that were not chemically treated.

No later than 60 days following the completion of each season’s treatment CDFG shall submit a monitoring report to LRWQCB. The report will include but is not limited to data required by the Monitoring and Reporting Program in the NPDES permit, flow rates during discharge, volume of rotenone applied at each station, volume of potassium permanganate used, a summary of the project, and an evaluation of the project success.

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