
Initial Study and Proposed Mitigated Negative Declaration

December 2012

Fire Mountain Lodge Hydroelectric Project FERC Project No. 1992

Tehama County

Draft released for public comment on **December 6, 2012**
Comments due by 12:00 PM (Noon) on January 11, 2013 to:

Michelle Lobo
State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, CA 98512-2000
or by email to: mlobo@waterboards.ca.gov

**State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000**

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Proposed Mitigated Negative Declaration

Project Title: Fire Mountain Lodge Hydroelectric Project

Lead Agency: State Water Resources Control Board
Division of Water Rights
Water Quality Certification Program
P.O. Box 2000
Sacramento, CA 95812-2000

Contact Person: Michelle Lobo, Division of Water Rights
Phone: (916) 327-3117
Email: MLobo@waterboards.ca.gov

The Initial Study (IS) and Proposed Mitigated Negative Declaration and draft water quality certification are located on the Division of Water Rights' web site at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/eqa_projects.shtml. If you are unable to access the draft documents online, you may request a copy by contacting Michelle Lobo.

Project Description

The Project consists of the continued operation of the Fire Mountain Lodge Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC) Project No. 1992. The Project's minor FERC license expired on April 30, 2010. The Project currently operates under annual licenses as the Project undergoes relicensing by FERC. The Project is owned and operated by Ken Willis (Applicant or Licensee). The Applicant is proposing improvements to the existing earth and concrete filled dam as part of its Project. The Project requires a Clean Water Act, Section 401 water quality certification (water quality certification) from the State Water Resources Control Board (State Water Board).

The existing Project consists of: (1) a 265-foot long earth and concrete filled dam; (2) a 0.8-acre reservoir; (3) a 38-inch intake tower; (4) a 1,540-foot long penstock; (5) a powerhouse with an installed capacity of 60-kilowatts; (6) a 1,000-foot long transmission line; and (7) appurtenant facilities. The power generated by the Project is used for commercial and residential purposes, solely for the owners of the Fire Mountain Lodge, a self-provider of electricity.

The Project is located on an Unnamed Creek (locally referred to as "Fern Springs Creek"), which is a tributary to Deer Creek, in the Deer Creek Watershed of Tehama County, California. The dam and reservoir are situated northeast of Fire Mountain Lodge. The dam and reservoir are located on 1.03 acres of United States Forest Service (USFS) land within Lassen National Forest and on 0.52 acre of private land owned by the Collins Pine Company.

The Licensee currently holds Water Rights License No. 4976 (Application No. 012096) issued by the State Water Board, Division of Water Rights for the diversion and use of water. License No. 4976 allows the license-holder to use up to, but not exceed, 3.0 cubic feet per second (cfs) of water from Fern Springs for power and domestic use year round.

The Project impounds water that originates from an Unnamed Spring locally known as "Fern Springs" (Fern Springs) and a second Unnamed Spring (Unnamed Spring). For 8-10 months of the year the dam obstructs flows from the Unnamed Spring for which the Licensee does not have a water right. This obstruction of flow from the Unnamed Spring occurs when the pipes that pass water through the dam are intentionally plugged to fill the reservoir. The water quality certification for the Project will include a specific condition to ensure that an amount of water equivalent to the natural flow from the Unnamed Spring flows into Fern Springs Creek year round. In an unobstructed system, water from the Unnamed

Spring joins with water from Fern Springs, to flow into Fern Springs Creek. Fern Springs Creek is a tributary to Gurnsey Creek; Gurnsey Creek is a tributary to Deer Creek; and Deer Creek is a tributary to the Sacramento River.

In the past, the pipes (used to pass water through the dam and to the penstock) became plugged and the dam overtopped eroding the crest and partially washing out the dam. Overtopping and dam failure events have led to uncontrolled flows and earthen dam material being carried to Fern Springs Creek below the dam. Sediment from these events can be transported down to Gurnsey Creek, a tributary to Deer Creek, which supports anadromous fish populations.

Modifications and improvements to the existing dam and spillway are needed to prevent future dam breaches and protect against sediment releases. Construction on the existing dam would involve repairs to the dam and outfall, and installation of an open channel spillway. Engineered fill would be used on the dam and proposed spillway. Water would be re-routed during construction. The proposed spillway would be surfaced with concrete and grout. The spillway headwall would be placed near the southeast high water mark of the reservoir. The spillway elevation would be approximately two feet below the large relief pipe, which is designed to relieve pressure from the dam, if necessary. The Applicant proposes to continue to operate the Project as it has been operated historically, with proposed modifications and improvements to the dam and stabilization of the adjacent Project road.

Measures incorporated into the Project to minimize impacts from construction activities include:

- Placement of straw wattles, erosion control blankets, or straw and tackifier in the area(s) of ground disturbance to protect against erosion;
- Placement of silt fencing and mulch on all stockpiles prior to rainfall events;
- Mulch and seed (using native plant species) all bare ground disturbed beyond the dam structure, with mulch to be applied at a rate of two tons per acre;
- Place stockpiles away from natural drainage courses;
- Place construction materials off of the ground, where possible;
- Place straw wattles or rock check dams in the existing ditch flowline to reduce runoff velocity;
- Ensure immediate cleanup and removal of Project-related debris and materials;
- Schedule prompt pick-up of debris containers; and
- Install an energy dissipater at all discharge points.

The following precautionary measure will be implemented as part of the Project:

- If any archaeological discoveries other than the historic hydroelectric power system (e.g., human skeletal remains, culturally modified lithic materials, structural features, or historic artifacts) are made during ground disturbing activities, all such activities shall stop within the 100-foot radius of the discovery, and a qualified archaeologist shall be contacted immediately to determine the nature of the find, evaluate its significance, and if necessary, suggest preservation or avoidance measures.

Findings and Determination

The State Water Board is the lead agency under the California Environmental Quality Act (CEQA) for issuance of the water quality certification for the Project. The environmental setting constitutes the baseline physical conditions by which the State Water Board would determine whether an impact is significant under CEQA.

The State Water Board, as lead agency under CEQA, has determined that no significant environmental effects will occur as a result of this Project. Revisions have been made to the Project to avoid or mitigate

adverse effects to a less than significant level. This determination is based on the attached Initial Study and Environmental Checklist and the following findings:

1. The Project includes all the activities and protective measures identified in the Initial Study.
2. There is no substantial evidence that any aspect of the Project, individually or cumulatively, may cause a significant effect on the environment.
3. The Project will not have environmental effects that will cause substantial adverse impacts on human beings, either directly or indirectly.
4. The Project will not degrade the quality of the environment, significantly reduce or degrade fish or wildlife habitat, decrease a wildlife population below self-sustaining levels, reduce the number or restrict the range of a special status species, or significantly affect important examples of California history or prehistory.
5. This Mitigated Negative Declaration reflects the independent judgment of the lead agency.

Initial Study

A copy of the Initial Study (IS) and Environmental Checklist/Analysis is attached.

Mitigation Measures

The following mitigation measures are included in the Project to reduce impacts to a less than significant level.

Mitigation Measure 1: The Applicant shall ensure that exclusion fencing be used to fence off aquatic habitats prior to any construction activities.

Mitigation Measure 2: The Applicant shall ensure that a qualified biologist performs a pre-construction survey for special status plant and animal species within the immediate vicinity of the construction areas not more than seven days prior to initiation of ground disturbing construction activities. The qualified biologist may recommend protective species-specific measures. The Applicant shall ensure that any species-specific measures recommended by the qualified biologist(s) are implemented.

Mitigation Measure 3: The Applicant shall ensure that a qualified biologist conducts a pre-construction survey for nesting birds if Project construction is to begin during avian breeding season (February 1 through August 15). The Applicant shall ensure that a qualified biologist conducts a pre-construction survey not more than seven days prior to initiation of ground disturbing construction activities to confirm the presence or absence of active bird nests for special status species in the Project area. If active nests are encountered, the Applicant shall ensure that species-specific measures designed to protect reproductive success be prepared by a qualified biologist, and that these measures are implemented to prevent abandonment of the active nest(s). The Applicant shall ensure that the perimeter of any nest-setback zone(s), as determined by the qualified biologist, be fenced or adequately demarcated with staked flagging, and construction personnel and equipment be restricted from the area.

APPROVED:

DRAFT

Barbara Evoy
Deputy Director for Division of Water Rights
State Water Resources Control Board

Date

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Initial Study and Environmental Checklist

- 1. Project title:** Fire Mountain Lodge Hydroelectric Project (Project)
- 2. Lead agency name and address:** California State Water Resources Control Board
Division of Water Rights
Water Quality Certification Program
P.O. Box 2000
Sacramento, CA 95812-2000
- 3. Contact person and phone number:** Ms. Michelle Lobo, (916) 327-3117
- 4. Project location:** The Project is located on Fern Springs Creek in the town of Mill Creek, in Tehama County, California. The dam and reservoir are located on 1.03 acres of United States Forest Service (USFS) land and on 0.52 acre of private land owned by the Collins Pine Company. Nearby cities are: Chester in Plumas County, which is approximately 15 miles east of the Project; and Mineral in Tehama County, which is approximately 17 miles northwest of the Project. A map of the Project location is included as Figure 1.
- 5. Project sponsor's name and address:** Mr. Jason Vine, P.E.
Trigon Inc.
225 Locust Street, Suite 206
Redding CA 96001
- 6. General Plan designation:** Unclassified
- 7. Zoning:** Unclassified
- 8. Description of project:** The Project involves the relicensing of the Fire Mountain Lodge Hydroelectric Project (Project) by the Federal Energy Regulatory Commission (FERC). The Project is referred to as FERC Project No. 1992. The Project involves the continued operation of a small hydroelectric project as well as the stabilization and resurfacing of the dam and outfall, and the construction of a spillway. Ken Willis (Applicant) owns and operates the Project. The Project requires a water quality certification from the State Water Resources Control Board (State Water Board) to ensure that the beneficial uses of the water, as described in the *Central Valley Regional Water Quality Control Board Sacramento River and San Joaquin River Basin Plan* (Sacramento-San Joaquin Basin Plan), are protected.

The existing Project consists of: (1) a 265-foot long earth and concrete filled dam; (2) a 0.8-acre reservoir; (3) a 38-inch intake tower; (4) a 1540-foot long penstock; (5) a powerhouse with an installed capacity of 60-kilowatts; (6) a 1000-foot long transmission line; and (7) appurtenant facilities. The power generated by the Project is used for commercial and residential purposes, solely for the owners of the Fire Mountain Lodge, a self-provider of electricity.

The Applicant proposes to continue to operate the Project as it has been operated historically, with proposed modifications and improvements to the dam and stabilization of the adjacent Project road. Improvements to the existing dam would involve repairs to the dam and outfall, and installation of an open channel spillway. Engineered fill would be used on the dam and proposed spillway. Water would be re-routed during construction. The proposed spillway would be surfaced with concrete and grout. The spillway headwall of the dam would be placed near the southeast high water mark of the reservoir. The spillway elevation would be approximately two feet below the large relief pipe, which is designed to relieve pressure from the dam, if necessary.
- 9. Surrounding land uses and setting:** Lassen Volcanic National Park, within Lassen National Forest, is located north of the Project and Plumas National Forest is located southeast of the Project. Lake Almanor is located approximately 11 miles east of the Project. Habitat in the Project vicinity consists

primarily of montane forest with a dominant overstory of sugar pine, Douglas fir, incense cedar, and ponderosa pine, and an understory of ceanothus, service berry, manzanita, braken fern, and other forest shrubs. (Wiemeyer Ecological Services, 2011). The dam and reservoir have minimal vegetation.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

Federal Agencies

FERC — Issuance of a new license for operation of the Project (re-license).

State Agencies

State Water Board — Section 401 of the Clean Water Act, water quality certification.

California Department of Fish and Game — Streambed Alteration Agreement for herbicidal spraying and for vegetation clearing by hand using chain saws and pruners.

Additional Considerations

USFS — As a mandatory conditioning agency pursuant to Section 4(e) of the Federal Power Act (16 USC §§ 797) USFS has the opportunity to submit conditions for hydroelectric projects located on USFS land that become requirements of any FERC license issued for those projects. USFS filed 4(e) conditions for the Project.

National Marine Fisheries Service — Filed *Comments, Preliminary §18 Prescriptions, §10(j) Recommended Conditions, and §10(a) Recommendations to FERC for the Fire Mountain Lodge Hydroelectric Project.*

Figure 1. Vicinity Map for Fire Mountain Lodge Hydroelectric Project (FERC Project No. 1992)



ENVIRONMENTAL CHECKLIST AND ANALYSIS

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Greenhouse Gas Emissions		Population/Housing
	Agriculture and Forestry Resources		Hazards & Hazardous Materials		Public Services
	Air Quality		Hydrology/Water Quality		Recreation
	Biological Resources		Land Use/Planning		Transportation/Traffic
	Cultural Resources		Mineral Resources		Utilities/Service Systems
	Geology/Soils		Noise		Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

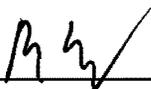
I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects: (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards; and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.



Barbara Evoy
Deputy Director for Division of Water Rights
State Water Resources Control Board

DEC 06 2012

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

In this California Environmental Quality Act (CEQA) analysis of an existing hydroelectric project, reauthorizing the Project would not yield many environmental impacts because most of the impacts have already occurred, and are not considered significant when compared to the current conditions. In contrast, the 401 water quality certification requires an analysis of the Project's overall effect on water quality, including whether the designated beneficial uses identified in the Sacramento-San Joaquin Basin Plan are adequately protected. The 401 water quality certification may also review a project's effects on public trust resources.

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must account for the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an environmental impact report (EIR) is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures reduces an effect from a "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

- a. Earlier Analysis Used. Identify and state where the earlier analyses are available for review.
- b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
- c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page(s) where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The following checklist is only a suggested form from Appendix G of the *2012 CEQA Statute and Guidelines* provided by the Association of Environmental Professionals. Lead agencies are free to use

different formats; however, lead agencies should normally address the questions from the following checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

- a. The significance criteria or threshold, if any, used to evaluate each question; and
- b. The mitigation measure identified, if any, to reduce the impact to less than significant.

Issues:

I. Aesthetics	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project is located in a forested area not viewable by potential visitors to the lodge, the public, or surrounding neighbors.				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not alter historic buildings within any scenic highway. The Project is not viewable from the highway and does not involve modifications to the highway.				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project does not substantially degrade the visual character of the site. The Project site is located within a forested area and is not visible to potential visitors to the lodge, neighbors, or the public.				
d) Create a new source of substantial light or glare which would adversely affect day or night time views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. No new source of light or glare would result from the Project.				

II. Agriculture and Forestry Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project would not convert any Farmland, or to non-agricultural use.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project site is designated as unclassified and is not under a Williamson Act contract.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project would not conflict with or result in a change to the existing zoning for the site.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Less-than-Significant Impact. The dam and associated structures are already located on USFS land and on land owned by a private logging company (Collins Pine Company). Minimal vegetation growing on top of the dam and the area for the spillway would be removed. No significant impact would occur due to the minimal vegetation that would be removed.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. Construction activities would occur on the top and backside of the dam with minimal vegetation removal and would not convert any farmland or forest land.

III. Air Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. See discussion below.				
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. See discussion below.				
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. See discussion below.				
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. Construction activities may take up to 30 days; however, construction is expected to take only three to seven days. Substantial pollutant concentrations affecting air quality are not anticipated. The Project is in the middle of the forest with no housing, habitable structures, or sensitive receptors in the immediate vicinity. Therefore, there would be no impact.				
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not create objectionable odors. Additionally, the Project is in the middle of the forest with no housing or habitable structures in the immediate vicinity of the dam. Therefore, there would be no impact.				
Discussion for Air Quality a), b), and c): The Project, located in Tehama County, falls in the Sacramento Valley Air Basin (Basin) and is under the jurisdiction of the Sacramento Valley Air Quality Management District. The Basin is in an attainment area for national criteria pollutants. For state criteria pollutants however, the Basin is a non-attainment area, exceeding objectives for 8-hour ozone and particulate matter less than ten microns in diameter (PM ₁₀). The Basin is in attainment or unclassified for all other state criteria pollutants. Since ozone itself is not emitted directly, precursors to ozone are used to estimate air emissions. For comparison with the Basin's air emissions inventory, ozone precursors include reactive organic gases (ROG) and oxides of nitrogen (NOx). The estimated total Project emissions are, in ton per day, 0.0019 of ROG, 0.014 of NOx, and 0.00063 of PM ₁₀ . Expected ROG, NOx, and PM ₁₀ Project emissions are less than one percent of the Basin's air emissions inventory and are considered negligible. Therefore, there would be no impacts to air quality.				

IV. Biological Resources	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or United States Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less-than-Significant Impact with Mitigation Incorporated. Several special status species may occur in the Project area. However, continuation of existing Project operations would not result in significant impacts. See discussion and mitigation measures below to protect special status species from temporary adverse construction impacts.				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less-than-Significant Impact. Continuation of existing Project operations would not result in significant impacts to habitat or sensitive natural communities. Dam and outfall repairs and spillway installation will occur on the top and backside of the existing dam. The dam and reservoir area have little vegetation. Therefore, Project activities will not substantially effect riparian habitat or other sensitive natural community.				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. There will be no impacts to wetlands because there are no wetlands in the immediate vicinity of the Project.				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less-than-Significant Impact with Mitigation Incorporated. Continuation of existing Project operations would not result in significant impacts. Mitigation measures below would avoid or minimize temporary adverse construction impacts.				

IV. Biological Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. There are no local policies or ordinances for biological resources to conflict with the Project.				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or an approved local, regional, or state habitat conservation plan.				
Discussion for Biological Resources a) and d): With the mitigation measures proposed below, the Project would not have a substantial adverse effect on any candidate, sensitive, or special status species. Since the dam is already in place as a barrier to any potential fish migration, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors. There is potential for Project construction to impede the use of native wildlife nursery sites, such as bird nesting sites due to construction activities; however, there would be no adverse effects with implementation of the mitigation measures proposed below.				
The Project area which occurs in the Childs Meadow quadrangle (California Natural Diversity Database, CDFG, 2012) exhibits mature vegetation. The creek area between Fern Springs and the dam and the creek area between the dam and Gurnsey Creek both consist of mature riparian scrub vegetation and downed logs. The reservoir area has very limited riparian vegetation and includes grasses and forbs. Gurnsey Creek consists of mature riparian scrub and riparian woodland habitat. (Wiemeyer Ecological Services, 2011)				
No state or federally listed plant species occur in the Childs Meadows quadrangle (CDFG, 2012). Plant species that do occur on the California Native Plant Society's list of rare and endangered plants for the Childs Meadows quadrangle include: dwarf resin birch (<i>Betula glandulosa</i>), watershield (<i>Brasenia schreberi</i>), Wilkin's harebell (<i>Campanula wilkinsiana</i>), slender bulrush (<i>Schoenoplectus heterochaetus</i>), and water bulrush (<i>Schoenoplectus subterminalis</i>) (CDFG, 2012). USFWS lists several threatened or endangered vernal pool plant species that may occur in Tehama County. However, as there are no vernal pools in the Project area (USFWS, 2012), no impacts to any listed vernal pool plant species would occur. Given that construction activities will occur in a previously disturbed area with very little vegetation, and the implementation of the mitigation measures listed below, no significant impacts to special status plant species are expected.				
While several special status species have been identified by the USFWS as potentially present, no individuals of these species have been observed in the Project area. The northern spotted owl (<i>Strix occidentalis caurina</i>), California red-legged frog (<i>Rana draytonii</i>), and giant garter snake (<i>Thamnophis gigas</i>) are listed as threatened in the USFWS <i>Species By County Report for Tehama County</i> (USFWS, 2012) but have not been observed in the Childs Meadows quadrangle (CDFG, 2012). The Pacific fisher (<i>Martes pennant</i>) (west coast distinct population segment), is a candidate for listing under the federal Endangered Species Act. While this mammal is known to occur in Tehama County, it has not been observed in the Childs Meadows quadrangle (CDFG, 2012).				
Several special status species which have been observed in the Project area include the state endangered willow flycatcher (<i>Empidonax traillii</i>), state threatened Sierra Nevada red fox (<i>Vulpes vulpes necator</i>), special status northern goshawk (<i>Accipiter gentilis</i>) and Cascades frog (<i>Rana cascadae</i>) (CDFG, 2012). Although no direct construction impacts to any special status species are expected, mitigation measures shall be implemented to protect special status species that may occur in the Project vicinity from indirect temporary construction-related impacts (e.g., noise).				

An aquatic assessment was completed by Wiemeyer Ecological Services on October 20, 2010. Wiemeyer Ecological Services found that the Cascades frog and foothill yellow legged frog (*Rana boylei*), both CDFG species of special concern, as well as western pearlshell (*Margaritifera falcata*) would find suitable habitat in the Project area (Wiemeyer Ecological Services, 2011). Although the aquatic habitat in the vicinity of the Project provides suitable habitat for fish, amphibian, and invertebrate species, no fish or amphibian species were observed in Fern Springs Creek or Gurnsey Creek (Wiemeyer Ecological Services, 2011).

Although the conditions to support trout in Fern Springs Creek are less than optimum, trout have been found in lower Fern Springs Creek. Wiemeyer Ecological Services (2011) found that the steep gradient of Fern Springs Creek and its lack of larger pools provide less than optimal conditions for resident rainbow trout (*Oncorhynchus mykiss*; *O. mykiss*). However, USFS' Heritage and Wild Trout Program fish surveys, conducted on June 17, 2011, found two brown trout (*Salmo trutta*), one rainbow trout (*O. mykiss*), and four brook trout (*Salvelinus fontinalis*) in lower Fern Springs Creek (USFS, 2011).

State and federally threatened Central Valley spring-run Chinook salmon (*O. tshawytscha*) evolutionary significant unit (ESU) and federally threatened Central Valley steelhead (*O. mykiss*) distinct population segment are not known to occur above Deer Creek Falls, a natural barrier for upstream migration. Therefore, these species are not expected to occur in Gurnsey Creek despite the availability of suitable habitat (Wiemeyer Ecological Services, 2011). Also, federal species of concern Central Valley fall/late fall-run Chinook salmon ESU, while not in the Project area, is present in the Deer Creek watershed below Deer Creek Falls (NMFS, 2011).

NMFS states in its *Comments, Preliminary §18 Prescriptions, §10(j) Recommended Conditions, and §10(a) Recommendations to FERC for the Fire Mountain Lodge Hydroelectric Project* that excessive sedimentation from the Project may harm anadromous salmonids downstream of Upper Deer Creek Falls (NMFS, 2011). Although steelhead and Chinook salmon are not expected in Fern Springs Creek or Gurnsey Creek, these fish species may be adversely affected by the Project if sediments from construction activities flow downstream over Deer Creek Falls, into Deer Creek and impact designated essential fish habitat and critical habitat (NMFS, 2011). Excessive sedimentation from Project construction could also adversely affect the resident trout that occur above Deer Creek Falls. However, Project construction sediment impacts to fish species would be considered less than significant with implementation of the mitigation measures listed below and the construction management practices described in the Project section of this document (page 4 of the proposed MND).

To limit erosion and prevent sediment from entering Gurnsey Creek, the Licensee shall stabilize and maintain the Project road that crosses Gurnsey Creek and leads to the Project dam for all portions of the Project road. The Licensee will consult with State Water Board staff and USFS to prepare a road stabilization and maintenance plan (Road Plan). Preparation and implementation of the Road Plan shall be a requirement of the water quality certification.

Concerns over potential environmental impacts from construction activities can be mitigated to less than significant levels. Although Project construction activities may take up to 30 days, construction is expected to be completed in three to seven days. There would be no discharge to Fern Springs Creek because the construction work would be performed on the top of the dam and on the backside (downstream-side) of the dam above the high water mark. Construction activities would not result in the loss of streambed, streambank, or aquatic habitat. Therefore, with implementation of the mitigation measures below, impacts to Fern Springs Creek, reservoir and associated special status aquatic species would be reduced to less than significant levels.

To protect special status species from temporary construction-related impacts, the following mitigation measures shall be implemented:

Mitigation Measure 1: The Applicant shall ensure that exclusion fencing be used to fence off aquatic habitats prior to any construction activities.

Mitigation Measure 2: The Applicant shall ensure that a qualified biologist(s) performs a pre-construction survey for special status plant and animal species within the immediate vicinity of the construction areas not more than seven days prior to initiation of ground disturbing construction activities. The qualified biologist(s) may recommend protective species-specific measures. The Applicant shall ensure that any species-specific measures recommended by the qualified biologist(s) are implemented.

Mitigation Measure 3: The Applicant shall ensure that a qualified biologist conducts a pre-construction survey for nesting birds if Project construction is to begin during the avian breeding season (February 1 through August 15). The Applicant shall ensure that a qualified biologist conducts a pre-construction survey not more than seven days prior to initiation of ground disturbing activities to confirm the presence or absence of special status species active nests in the Project area. If active nests are encountered, the Applicant shall ensure that species-specific measures

designed to protect reproductive success be prepared by a qualified biologist, and that these measures are implemented to prevent abandonment of the active nest(s). The Applicant shall ensure that the perimeter of any nest-setback zone(s), as determined by the qualified biologist, be fenced or adequately demarcated with staked flagging, and construction personnel and equipment be restricted from the area.

V. Cultural Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in the CEQA Guidelines §15064.5?

No Impact. See discussion below.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to the CEQA Guidelines §15064.5?

No Impact. See discussion below.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. See discussion below.

d) Disturb any human remains, including those interred outside of formal cemeteries?

No Impact. See discussion below.

Discussion for a), b), c), and d): Coyote & Fox Enterprises conducted an archaeological survey on November 3, 2010, and prepared a cultural resources study. The historic hydroelectric power system for Fire Mountain Lodge is the one archaeological site identified and recorded within the Area of Potential Effects. No other cultural resources were discovered. However, the historic hydroelectric power system is not considered eligible for inclusion on the National Register of Historic Places because it lacks integrity (as defined by the National Register Guidelines) and does not meet any of the four criteria for eligibility. Therefore, the Project would not have a substantial adverse change in the significance of any historic properties or cultural resources. (Coyote & Fox Enterprises, 2010)

If any archaeological discoveries other than the historic hydroelectric power system (e.g., human skeletal remains, culturally modified lithic materials, structural features, or historic artifacts) are made during ground disturbing activities, all such activities shall stop within a 100-foot radius of the discovery, and a qualified archaeologist shall be contacted immediately to determine the nature of the find, evaluate its significance, and if necessary, suggest preservation or avoidance measures.

VI. Geology and Soils	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
No Impact. The Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving any of the above.				
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. Dam improvements, which are part of the proposed Project, would decrease existing soil erosion.				
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. Construction would stabilize the dam and associated soils.				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. There are no expansive clay soils in the Project area.				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project does not involve septic systems or wastewater disposal systems.				

VII. Greenhouse Gas Emissions	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact. The Project would not result in a decrease in hydropower generation that would require use of greenhouse gas emitting devices to compensate for the loss. Due to the small size and short duration of the construction portion of the Project, greenhouse gas emissions from construction would be considered negligible and would not rise to the level of significant. Therefore, no significant impacts from greenhouse gases are expected.</p>				
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact. The Project would not conflict with an adopted plan, policy, or regulation for greenhouse gases.</p>				

VIII. Hazards and Hazardous Materials	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not routinely transport or dispose of hazardous materials.				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less-than-Significant Impact. The small scale of the Project precludes the use of large quantities of hazardous materials, therefore, no significant impacts would be anticipated.				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project is not located near an existing or proposed school.				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The closest sites listed on the Hazardous Wastes and Substances Site List are located in Red Bluff and Corning, which are more than 50 miles from the Project. The Project area is not listed as a hazardous materials site by the Department of Toxic Substances Control and no sites near the Project are listed in the State Water Board's GeoTracker Database.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project is in the forest and is not within two miles of an airport or within an airport land use plan.				

VIII. Hazards and Hazardous Materials	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. There is no private airstrip within the immediate vicinity of the Project.				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project is in the forest and not near roads or highways that may be used in an emergency response plan or emergency evacuation plan.				
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. People and structures would not be exposed to a significant risk of loss, injury, or death involving wildland fires due to the Project.				

IX. Hydrology and Water Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. As proposed, the Project would not violate any water standards or waste discharge requirements. See discussion below.				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not deplete groundwater supplies, interfere with groundwater recharge to lower the groundwater table, or create a net deficit in aquifer volume.				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less-than-Significant Impact. As proposed, the Project would not result in substantial erosion or siltation on- or off-site. See discussion below.				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less-than-Significant Impact. The Project would not substantially alter the existing drainage pattern of the area. Breaches and overtoppings of the existing dam previously altered the drainage pattern of the site. This current condition is considered the baseline for assessment of this Project. As proposed, the Project would not substantially increase the rate or amount of surface runoff. Effects from the Project would not result in on- or off-site flooding. See discussion below.				

IX. Hydrology and Water Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less-than-Significant Impact. There is no stormwater drainage system in this forested area for the Project to impact. See discussion below.				
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not otherwise substantially degrade water quality.				
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not place any housing within a 100-year flood hazard area.				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project is not located in a 100-year flood hazard area.				
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The purpose of construction activities is to correct existing erosion problems with the dam and avoid future dam failure; therefore, there would be no impact.				
j) Cause inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. There is no ocean near the Project that may result in a tsunami. The closest lakes are Wilson Lake and Lake Almanor. Wilson Lake is approximately eight miles from the Project site and Lake Almanor is approximately 11 miles from the Project site, so there would be no impacts from a seiche. Construction activities on the dam would reduce erosion of the dam and would not result in mudflow. Therefore, the Project would not cause inundation by seiche, tsunami, or mudflow.				

Discussion for a), c), d), and e): Measures incorporated into the Project include use of the following: placement of straw wattles, erosion control blanket, or straw and tackifier in the area(s) of ground disturbance to protect against erosion; placement of silt fencing and mulch on all stockpiles prior to rainfall events; mulch and seed (using native plant species) all bare ground disturbed beyond the dam structure, with mulch to be applied at a rate of two tons per acre; place stockpiles away from natural drainage courses; place construction materials off-ground where possible; place straw wattles or rock check dams in the existing ditch flowline to reduce runoff velocity; ensure immediate cleanup and removal of Project-related debris and materials; schedule prompt pick-up of debris containers; and install an energy dissipater at all discharge points. These activities would help protect water quality during construction. Exclusion fencing mentioned in Mitigation Measure 1 (page 5 of the proposed MND) will be in place during construction activities. Dam and outfall repairs and spillway installation will be restricted to the top of the dam and the backside of the dam (downstream-side) above the high water mark. Construction is proposed to occur when the water level is lowest, typically in September and October. An excavator equipped with a thumb attachment will be used to create the spillway ramp and add grouted rip rap to the spillway ramp.

X. Land Use and Planning	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not divide an established community.				
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect.				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not conflict with any applicable habitat conservation plan or natural community conservation plan.				

XI. Mineral Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. No known mineral resource would be lost due to the Project.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. No known mineral resource recovery sites would be lost due to the Project.

XII. Noise	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less-than-Significant Impact. The Project is in the forest with no neighbors in the immediate vicinity. There may be visitors to the lodge but due to the short duration of Project construction, there would be a less than significant impact to people from noise.				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less-than-Significant Impact. Due to the short duration of Project construction, there would be a less than significant impact to people visiting the lodge from excessive groundborne vibration or groundborne noise levels.				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. There would be no substantial permanent increase in ambient noise levels from the Project.				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less-than-Significant Impact. Construction activities would create temporary noise that may be substantial. However, there are no residences in the immediate vicinity, except the lodge, that would be disturbed by the temporary construction noise. The Project would be completed in approximately three to seven days. There would be a less than significant impact to potential visitors to the lodge during construction. The Project would not result in additional ambient noise levels once construction is completed.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project is not located within an airport land use plan or within two miles of a public airport or public use airport.				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project is not located within the vicinity of a private airstrip.				

XIII. Population and Housing	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. No new homes or businesses would result from the Project. No roads or other infrastructure would be extended. Therefore, the Project would not induce substantial population growth.				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not displace any existing housing.				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not displace people.				

XIV. Public Services	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<p>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other public facilities?</p> <p>No Impact. The Project would not create adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XV. Recreation	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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Would the project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The Project is not expected to increase the use of existing neighborhood or regional parks, and will not cause substantial deterioration of recreational facilities. Therefore, there would be no impact.

b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The Project does not involve creating or expanding recreational facilities.

XVI. Transportation/Traffic	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not impact an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.				
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not conflict with any congestion management program.				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would have no impact on air traffic patterns.				
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project does not involve design features for public roads or highways.				
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not occur on public roads or highways that would result in inadequate emergency access.				

XVI. Transportation/Traffic	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. The Project would not occur on public roads or highways that would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

XVII. Utilities and Service Systems	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project does not involve wastewater, so there would be no impact.				
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project does not involve construction of water or wastewater treatment facilities, so there would be no impact.				
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project does not involve construction of storm water facilities. Therefore, there would be no impacts.				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. No new or expanded entitlements are needed for the Project. There would be no impact.				
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact. The Project would not increase demand on any associated wastewater treatment system, nor affect the provider's capacity or existing commitments beyond what was previously permitted for the use of the Fire Mountain Lodge. Therefore, there would be no impact.				

XVII. Utilities and Service Systems	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact. The construction portion of the Project will require the use of a landfill to dispose of construction related materials and debris. However, use of the landfill would be short term and would not exceed the permitted capacity of the landfill. Therefore, there would be no impact.</p>				
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact. The Project does not involve solid waste removal, so there would be no impact.</p>				

XVIII. Mandatory Findings of Significance	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<p>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Less-than-Significant Impact with Mitigation Incorporated. With the protective measures that are incorporated into the Project (on page 4 of the proposed MND) and mitigation measures (on page 5 of the proposed MND) incorporated into the Project, there would not be any significant impacts.</p>				
<p>b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact. The Project would not have cumulatively considerable impacts.</p>				
<p>c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact. The Project would not cause substantial adverse effects on human beings, either directly or indirectly.</p>				

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino*, (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors*, (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656. Revised 2009.

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- 2) Coyote & Fox Enterprises. 2010. Cultural Resources Study.
- 3) NMFS (National Oceanic and Atmospheric Administration's National Marine Fisheries Service). 2011. Letter and enclosures from Richard Wantuck, NMFS, to Secretary Bose, FERC, Re: "United States Department of Commerce's National Oceanic and Atmospheric Administration's National Marine Fisheries Service's Southwest Region's Federal Power Act Comments, Preliminary § 18 Prescriptions, § 10(j) Recommended Conditions, and § 10(a) Recommendations for the Fire Mountain Lodge Hydroelectric Project, Federal Energy Regulatory Commission Project No. 1992-003, located on Fern Spring Creek in the Deer Creek Watershed, California." NMFS, Southwest Region, Santa Rosa, California. June 22, 2011.
- 4) NMFS (National Oceanic and Atmospheric Administration's National Marine Fisheries Service). 2012. Letter and enclosure from Richard Wantuck, NMFS, to Secretary Bose, FERC, Re: "Comments on the Federal Energy Regulatory Commission's Draft Environmental Assessment for the Fire Mountain Lodge Hydroelectric Project, Project No. 1992-003, located on Fern Spring Creek in the Deer Creek Watershed, California."
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