Exhibit 3: RCD Board resolution and Mitigated Negative Declaration

RESOURCE CONSERVATION DISTRICT
OF THE
SANTA MONICA MOUNTAINS

122 NORTH TOPANGA CANYON BOULEVARD TOPANGA, CALIFORNIA 90290
(310) 455-1030 FAX (310) 455-1172

DANIEL C. PREECE
District Manager

BOARD OF DIRECTORS
NANCY L. HELSLEY
President
GLENN BAILEY
Vice President
DENNIS WASHBURN
Treasurer
DAVID GOTTLIEB
WOODLAND HASTINGS

BOARD OF DIRECTORS
RESOURCE CONSERVATION DISTRICT OF THE SANTA MONICA MOUNTAINS

Board Resolution Number 05-06
Adopted: March 30, 2005

RESOLUTION APPROVING MITIGATED NEGATIVE DECLARATION FOR SOLSTICE CREEK STEELHEAD RESTORATION PROJECT.

WHEREAS, an Environmental Assessment has been completed by the National Park Service for the Solstice Creek Steelhead Restoration Project, which fully described the proposed project, the comments received during the public review and responses to those comments.

WHEREAS, the Resource Conservation District of the Santa Monica Mountains completed a Mitigated Negative Declaration, which also included a description of the project, a public review process and responses to public input.

WHEREAS, the Board of Directors voted unanimously to approve the Mitigated Negative Declaration for the Solstice Creek Steelhead Restoration Project.

NOW THEREFORE BE IT RESOLVED, that the Board of Directors does hereby approve the Mitigated Negative Declaration of the Solstice Canyon Steelhead Restoration Project.

PASSED AND ADOPTED, by the Board of Directors of the Resource Conservation District of the Santa Monica Mountains in the County of Los Angeles in the State of California on March 30, 2005.

SIGNED _____
Nancy L. Helsley, President, RCDSMM Board of Directors

INITIAL STUDY CHECKLIST FORM
FOR SOLSTICE CREEK
STEELHEAD RESTORATION PROJECT

Prepared for:

MOFFATT & NICHOL
250 W. Wardlow Road
Long Beach, California 90807

Prepared by:

CHAMBERS GROUP, INC.
17671 Cowan Avenue, Suite 100
Irvine, California 92614
(949) 261-5414

November 2004
ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:**
   Solstice Creek Steelhead Restoration Project

2. **Lead Agency Name and Address:**
   Resource Conservation District of the Santa Monica Mountains
   122 N. Topanga Canyon Blvd.
   Topanga, CA 90290

3. **Contact Person and Telephone Number:**
   Steve Williams, Conservation Biologist – 310-455-1030 x 212

4. **Project Location:**

   Solstice Canyon

5. **Project Sponsor's Name and Address:**
   Resource Conservation District of the Santa Monica Mountains
   122 N. Topanga Canyon Blvd.
   Topanga, CA 90290 and
   National Park Service, Santa Monica Mountains National Recreation Area
   401 West Hillcrest Drive
   Thousand Oaks, CA 91360

6. **General Plan Designation:**
   Open Space

7. **Zoning:**
   Open Space

8. **Description of Project:**

Project Background

Solstice Canyon is a 550-acre park within the Santa Monica Mountains National Recreation Area in Los Angeles County (Figure 1). The National Park Service acquired Solstice Canyon from the Santa Monica Mountains Conservancy in 1997. Solstice Creek, which flows through Solstice Canyon to the Pacific Ocean, historically supported steelhead (*Oncorhynchus mykiss*). The Southern California Evolutionarily Significant Unit of steelhead has been listed by the federal government as endangered and by the California Department of Fish and Game as a California Species of Special Concern. Steelhead are the ocean-going (anadromous) form of rainbow trout. They are born in fresh water, then migrate to the ocean, and return to freshwater to spawn.

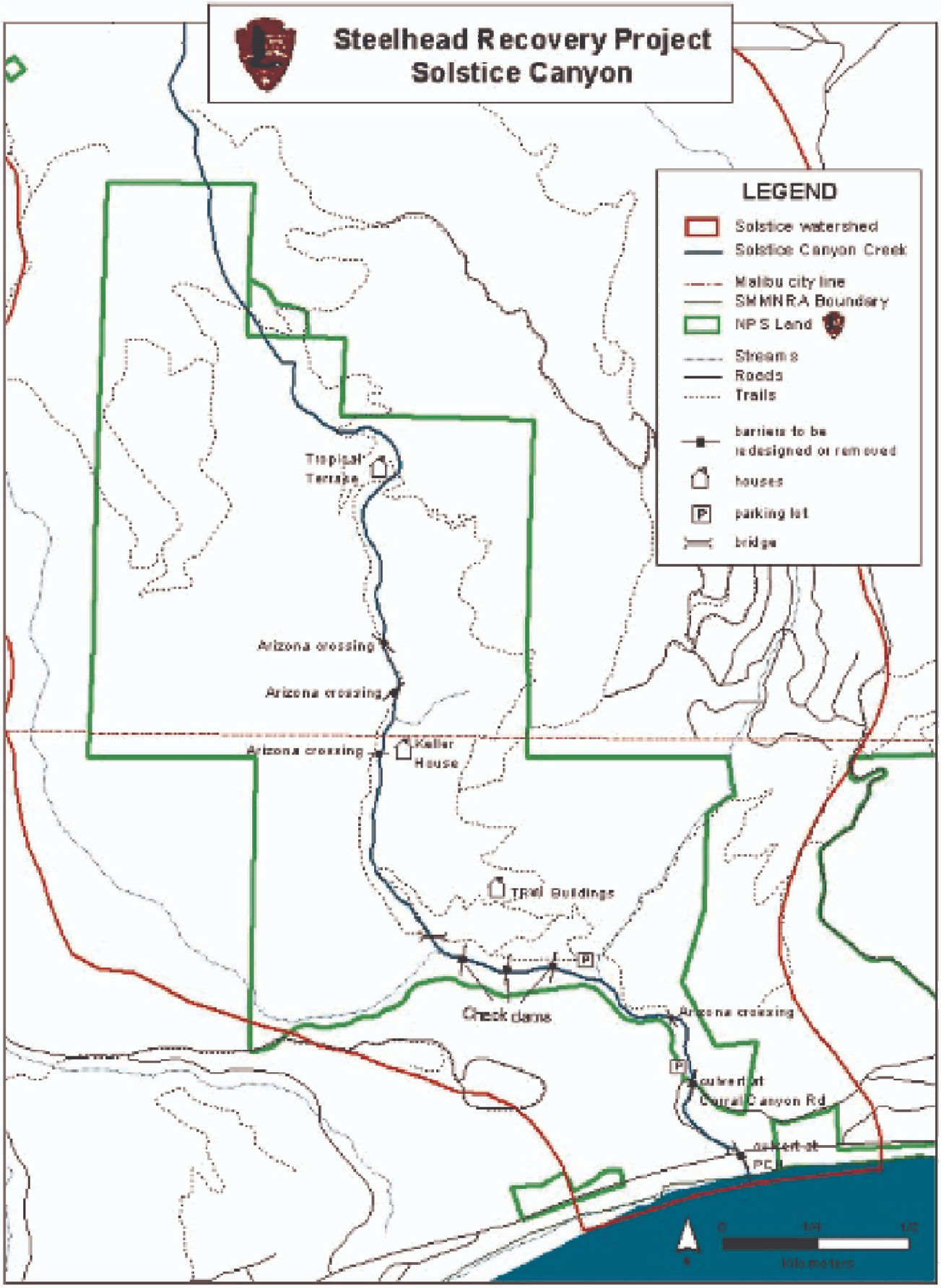
The National Marine Fisheries Service has evaluated the potential for Solstice Creek to support steelhead and determined that the stream habitat appears suitable from the ocean to the waterfall adjacent to Tropical Terrace, approximately 1.8 miles upstream from the mouth of Solstice Creek (Spina and Johnson 1999). This waterfall is a natural barrier to steelhead. However, several barriers prevent steelhead passage from the ocean to the waterfall. Figure 2 shows the potential steelhead habitat in Solstice Creek and the barriers to steelhead passage. These barriers include several check dams and Arizona crossings upstream of Corral Canyon Road.

SOLSTICE 3261 07-20-04

SCALE 1:400,000 1"= 6.31 miles

SOURCE: USGS QUADRANGLE MALIBU BEACH

PROJECT LOCATION MAP
SOLSTICE CANYON
Figure 1



LOCATION OF PROJECT FEATURES
Figure 2

The NPS and the Resource Conservation District of the RCD plan to restore steelhead habitat in Solstice Creek by removing the barriers to fish passage. The project's purpose is to remove the barriers to establish unimpeded fish passage through the nearly one mile reach upstream of the NPS parking area in Solstice Canyon. The proposed project plans to remove the three check dams and four Arizona crossings that impede fish passage upstream of the parking area. The removal of the two lowest barriers, at Pacific Coast Highway and Corral Canyon Road, is not part of the proposed project. The removal of the three check dams and Arizona crossings will insure that when the two lower barriers are removed at a later date, steelhead will have a significant length of streambed available for spawning.

RELATIONSHIP TO EXISTING PLANS

The Recreation Area recently updated its 1982 General Management Plan (GMP). The draft GMP/ Environmental Impact Statement (EIS) was released for public review in January 2001. Although the NPS did not manage the project area when it prepared the 1982 GMP, that plan specified that " . . .altered ecosystems will be restored to more natural conditions wherever possible." The proposed project analyzed in this Environmental Assessment (EA) supports the restorative objectives of the 1982 GMP and the draft 2001 GMP.

The Recreation Area has completed a Strategic Plan that presents a five-year outline of goals and objectives for the years 2000 to 2005, including restoring parklands, improving the local status of federally listed threatened and endangered species, improving visitor satisfaction, and improving visitor safety. The proposed project analyzed in this EA meets all those goals.

In addition, a plan to restore fish passage and riparian habitat along Solstice Creek has been prepared by the NPS and the Santa Monica Mountains Resource Conservation District, in cooperation with the California Department of Transportation, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), the California Department of Parks and Recreation, California Trout, and other state and local organizations. The Solstice Creek restoration plan identifies impediments to the upstream migration of steelhead trout that prevent steelhead from spawning in the creek. Implementation of the plan would eliminate or modify migration barriers and restore habitat for steelhead.

COMPLETE REMOVAL OF CHECK DAMS AND ARIZONA CROSSINGS

Dams 1, 2, and 3 would be completely removed, and no portions of the structures would remain. Dam 4 does not need to be removed because it is not impeding fish passage. Creek side slopes at Dam 3 would be regraded to a slightly flatter angle of repose. For this project, either no sediment would be removed behind the dams and the sediment would be permitted to move downstream after construction or part of the sediment would be removed to re-create a more natural stream grade throughout the reach. In the case of partial sediment removal a minimal volume of sediment would be removed prior to dam removal to flatten the stream grade along the reach and reduce downstream sedimentation.

Arizona crossings 2 through 4 would be completely removed. Complete removal would involve removing the concrete cap of the road crossings. Sediment below or behind the crossings would not be removed.

For Arizona Crossing Number 1 to Keller House, the road crossing would be replaced with a small bridge to allow residents to access the Keller House with vehicles. The bridge would be either a pre-fabricated structure or a flat railcar bridge. It might be oriented either perpendicular to the creek or at a slight angle to the creek planform, depending on the turning radius of the type of fire truck that would respond to emergencies at the site. No upstream sediment removal would occur, except possibly minor re-use of boulders to buttress the bridge foundations. The concrete in the bridge foundations (the abutment and wing wall) requires 30 days to cure, so the bridge would not be able to be used for this initial period after construction.

Stream access would be through a route determined by a biologist to have the least impact on riparian habitat. If any significant disturbance to habitat occurs, habitat will be restored following the completion of the barrier removal. Revegetation of any access routes from the NPS road to the creek would occur immediately after construction to discourage invasion by non-native vegetation.

CONSTRUCTION METHODS

Project construction is anticipated to occur during September and October to avoid impacts to breeding sensitive species and the peak public use season. The park will be partially closed on weekdays during this period, but will remain open on weekends. All work will occur during the standard construction hours of 7:00 a.m. to 5:00 p.m., with no work occurring on weekends. Equipment will be staged at the stockpile site shown in Figure 2.

Removal of Check Dams

The removal of the check dams would take approximately two weeks with work at sites occurring simultaneously. Dam sites 1 and 2 would be dewatered together by the digging of a temporary pit in the stream bed upstream of Dam 2 to collect stream discharge, and the pumping of the water through a six-inch-diameter line using three 110-horsepower pumps to an area downstream of Dam 1. Dam 3 would be dewatered using methods similar to those for Dams 1 and 2, but as a separate effort. No electric power is available. The total acreage to be disturbed for all sites combined is less than 2 acres, with the total quantity of material being less than 20,000 cubic yards.

Check Dam 1 (Figure 3)

This dam is constructed of stone and concrete. It has about a 9-foot drop from the spillway to the water surface in the plunge pool below, and the pool itself is about 3 feet deep. The structure has incurred moderate damage, with scour having occurred around the right edge of the spillway and additional scour at the base of the dam. This dam has the second largest volume of stored sediment of any of the barriers.

Destruction of Dam 1 would occur using a crane with a wrecking ball and bucket reaching into the site from the road south of the dam. The ball would demolish the structure, and the bucket would be used to lift debris out to the road, for truck transport to a stockpile site immediately north of the lower flat rail car bridge and/or offsite to an appropriate disposal facility. Disturbance to habitat will not occur to access the site as it is reached from above. However, there is a large alder (*Alnus rhombifolia*) directly behind the dam in the stream. This tree will be lost. Removal of the side wall also will result in the loss of some riparian vegetation.

Check Dam 2 (Figure 4)

Dam 2 is a relatively small dam with a 3-foot drop at low flow. Destruction of Dam 2 would occur using a hoe-ram, or rubber tired backhoe fitted with a hydraulic ramming device. A loader would be used to carry debris out of the channel to a truck on the road for transport to the stockpile site and/or offsite. For the option of partial sediment removal, minor re-grading of the channel upstream of the dam would occur using a small bulldozer, and soil would be stockpiled at the site upstream of the flat rail car bridge. Disturbance to vegetation would occur over a 10-foot wide corridor from the main access road into the site over a distance of 75 feet. The contractor would access the site via the clearest, least sensitive path to the site as determined by a project biologist. A limited number of trees may be affected including two large alders that will be lost.

Check Dam 3 is an earthen dam with a stone and concrete apron and spillway that appears to have been later retrofitted with a poured concrete spillway on top. The spillway has sidewalls and central piers constructed with slots to accommodate weir boards, probably to impound water during the dry season and allow sluicing of sediments during the high flow season. Dam 3 has about an 8-foot drop from the

spillway to the water surface in the plunge pool below and the pool itself is about 2 feet deep. Dam 3 has the largest volume of stored sediment of any of the barriers.

Demolition of Dam 3 would occur using both a hoe-ram to break up the dam, and a crane and wrecking ball reaching over from the road to the north of the dam. The crane and ball would destroy structures and remove the debris out of the channel and lift it to a truck on the road for transport to the stockpile site and/or offsite. A loader would grade the channel banks to remove vertical walls and re-create a more natural stream slope. At least two mature sycamore trees (*Platanus racemosa*), may be removed along the north bank, as well as an alder on the south bank. Access to the site would disturb a corridor 10 feet wide by 100 feet long. The contractor would access the site via the clearest, least sensitive path to the site as determined by a project biologist.

FULL REMOVAL OF ARIZONA CROSSINGS

Removal of Arizona crossings will occur using standard earthmoving equipment, similar to that used for the removal of check dams. The dams can be removed within two weeks, while construction of the bridge at Arizona Crossing 1 may require one month.

The Keller House Arizona Crossing 1 (Figure 6) will be demolished using a hoe-ram as described above. Debris will be removed using a wheeled loader to place it into trucks to haul it to the stockpile and/or offsite. No disturbance to native habitat will occur to access the site as it lies along the main access road. No trees will be removed.

Arizona Crossing 2 (Figure 7) will also be demolished using a hoe-ram accessing the site along the lower road, and debris will also be removed using a backhoe to lift it out of the creek and to place it into trucks to haul it to the stockpile and/or offsite. Limited disturbance to riparian habitat may occur over a distance of 100 feet. A road provides access, but trees encroach that could be slightly affected. No trees should need to be removed.

Dewatering for Arizona Crossings 1 and 2 will occur just upstream of Arizona Crossing 2. The contractor will excavate a pit and install three 110-horsepower pumps and a six-inch-diameter line at a small vacant level ground area that exists adjacent to and east of the creek. Water will be directed into the pit and through the line to a site downstream of Arizona Crossing 1.

Arizona Crossing 3 (Figure 8) will be demolished using a hoe-ram accessing the site from the upper road, and debris will also be removed using a wheeled loader to place it into trucks to haul it to the stockpile and/or offsite. This site will be dewatered by excavating a pit and installing three 110-horsepower pumps and a six-inch-diameter line. Water will be directed into the pit and pumped through the line to just downstream of this site. No disturbance will occur by equipment accessing the site and no trees will be removed, as the site is at the junction of two access roads.

Arizona Crossing 4 (Figure 9) will be demolished using jack hammers and manpower to break up the concrete. A backhoe will be used to reach down into the creek to lift out debris placed by hand into the bucket. The bucket will place the debris into a wheeled loader that will be backed up to the site along the upper road. The road between Arizona Crossings 3 and 4 may have to be widened by up to two feet along the hillside to provide sufficient clearance for the loader. It is anticipated that no trees will need to be removed, however. Replanting will occur with native vegetation at any site graded for minor road widening. Site dewatering will not need to occur due to the minor amount of work required at this site.

9. Surrounding Land Uses and Setting:

The check dams and Arizona crossings are all contained within the National Park Service, Santa Monica Mountains National Recreation Area.

10. Other Public Agencies Whose Approvals Are Required:

Agency	Permit or Approval
National Park Service	NEPA approval
Regional Water Quality Control Board	401 Certification
California Department of Fish and Game	1601 Streambed Alteration Agreement
U.S. Army Corps of Engineers	404 Permit

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
- ☐ Agriculture Resources
- ☐ Air Quality
- ☐ Biological Resources
- ☐ Cultural Resources
- ☐ Geology and Soils
- ☐ Hazards/Hazardous Materials
- ☐ Hydrology/Water Quality
- ☐ Land Use and Planning
- ☐ Mineral Resources
- ☐ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation/Circulation
- ☐ Utilities and Service Systems
- ☐ 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.	x
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 EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	☐

Signature _____ Date _____

Printed Name _____ Agency _____

Figure 3 Complete Removal of Check Dam 1

Figure 4 Complete Removal of Check 2

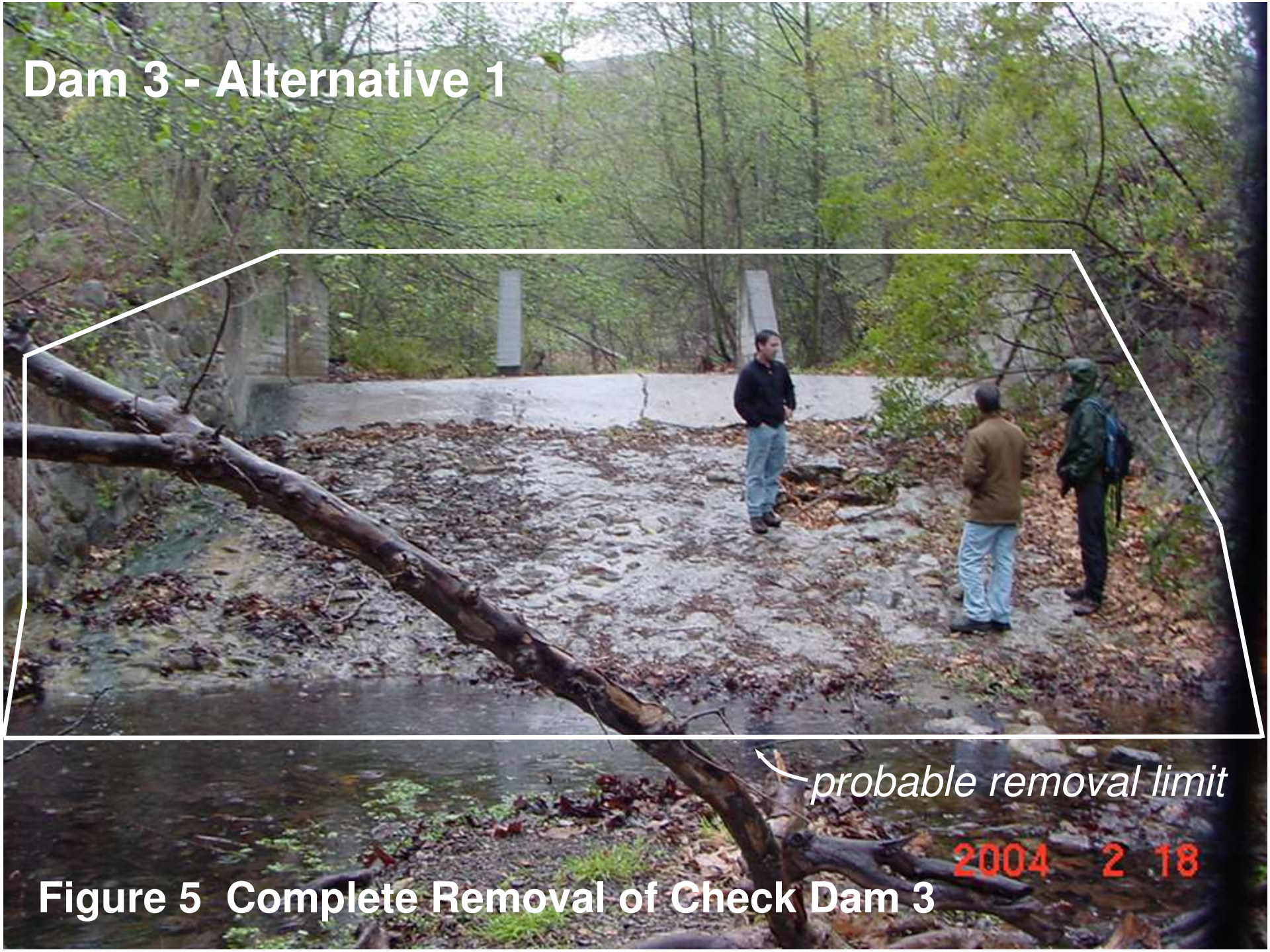


Figure 5 Complete Removal of Check Dam 3

Figure 6 Removal of Keller House Crossing

Figure 7 **Removal of Arizona Crossing 2**

Figure 8 Removal of Arizona Crossing 3

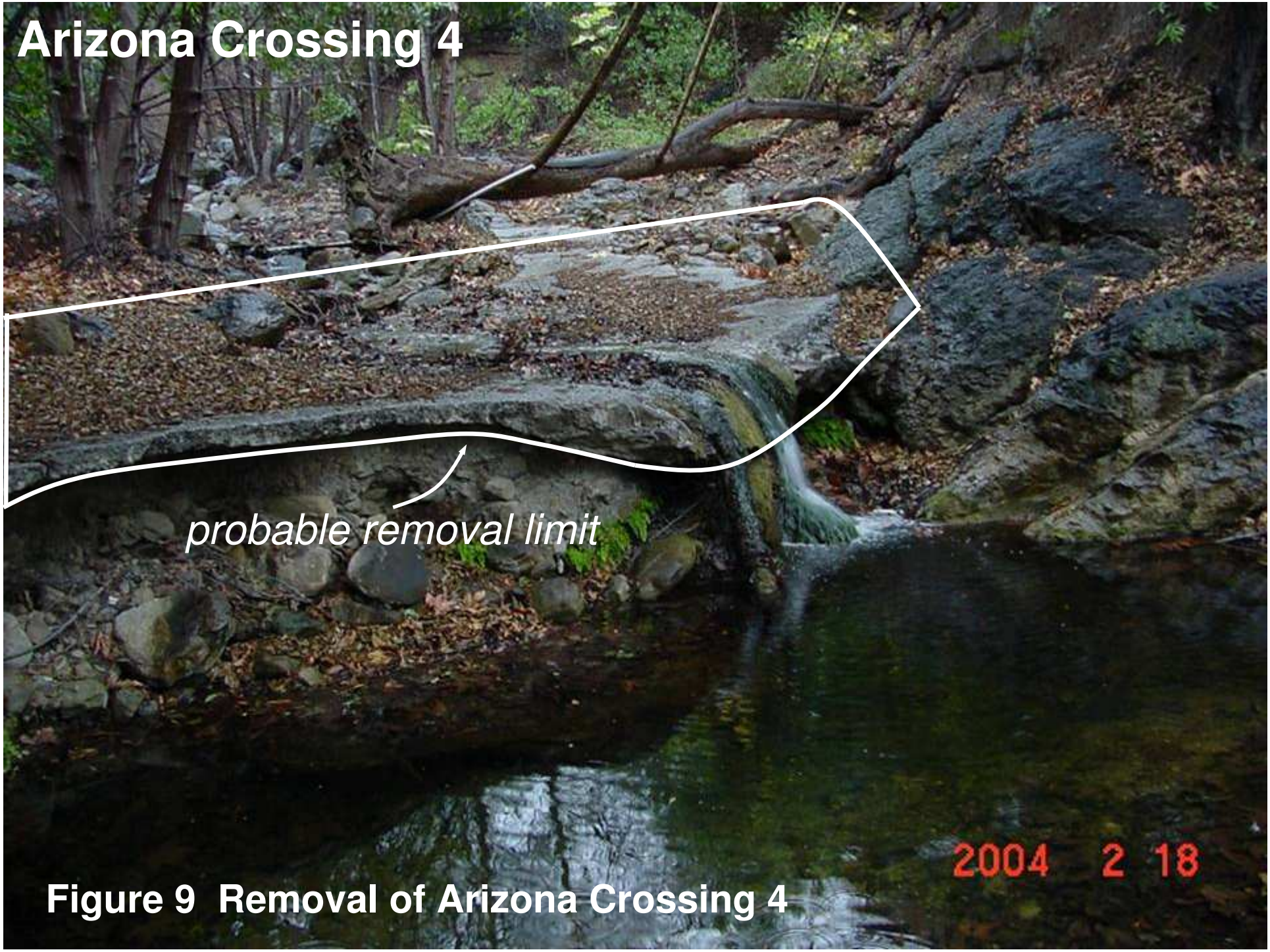


Figure 9 Removal of Arizona Crossing 4

Figure 10 Partial Removal of Check Dam 1

Figure 11 Partial Removal of Check Dam 2

Figure 12 Partial Removal of Check Dam 3

I. AESTHETICS

The Solstice Canyon recreation area supports a variety of habitats visually dominated by chaparral and coastal sage scrub. Structures are located in the project area that visually detract from the otherwise pristine nature setting. Such structures include the visitor center, restrooms, and parking lot which can be seen from trails along higher elevations. Private residences located in the urban communities abut the project boundary and can be seen from numerous locations within the park.

Solstice Creek is a low-flow channel that meanders through the center of the park. The approximately 10-foot-wide channel supports a mix of wetland plants, woody and herbaceous vegetation along its borders. A 25-foot-wide channel runs through the Arizona crossing portion of the project area. The project areas are near the road that provides vehicular access through the park; however, the creek is at a lower elevation than the road, and the road is not in the viewshed of the individual areas where fish barriers are proposed for removal.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project have a substantial adverse effect on a scenic vista?	☐	☐	☑	☐

The individual projects are small and would generally have little impact on the overall character of the visitor's visual experience. Removal of small Dams will result in a more open, natural setting. However, at the same time, the hydrologic waterfall features of Dams 1 and 2 will be lost. For Dam 3, the concrete Dam structure will be removed, resulting in a more natural environment. Similarly, the concrete to be removed at the Arizona Crossings will also result in a more natural environment. Overall, impacts are considered to be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Would the project substantially Damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☑	☐

The park road is not a designated state scenic highway. While demolition of Dams 2 and 3, will impact a limited number of trees; including one mature tree at Dam 2, no loss of rare trees or identified heritage trees is expected to occur. Impacts are less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Would the project substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☑	☐

See (a) above. Overall, impacts are less than significant. Even though some waterfalls will be removed, the removal of manmade structures will create a more natural visual environment.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
d)	Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑

No lighting will be used, as such no impacts will result.

II. AGRICULTURE RESOURCES

The land is National Park Service land, used for recreation. No agricultural lands are associated with the park.

a)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☑

The project area would not convert Prime Farmland, Unique Farmland of Statewide Importance to a non-agricultural use. No impacts would result from the proposed project.

b)	Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☑

According to the Williamson Act contract, there is no existing zoning for agricultural usage. No impacts would result in the proposed project.

c)	Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☑

No other changes in the existing environment could possibly result in the conversion of Farmland to non-agricultural use. No impacts would result in the proposed project.

III. AIR QUALITY

Solstice Creek is located within Source/Receptor Area (SRA) 2 (Northwest Coastal Los Angeles County). This SRA is one of 38 designated areas under South Coast Air Quality Management District (SCAQMD) jurisdiction. The communities within a given SRA are expected to have similar climatology. Additionally, similar traffic levels and the presence of local point sources contribute emissions to these areas. Subsequently, similar ambient air pollutant concentrations are expected within any given SRA. Unfortunately, monitoring within SRA 2 does not monitor fine particulate matter. The Southwest Coastal Los Angeles County monitoring station located to the southeast (SRA 3) is the next nearest monitoring station and would be most representative of local pollutant concentrations. The most current five years of data monitored at these stations are included in Table 2. The data indicate that the area is sensitive to both ozone and PM_{10}, as these State standards are violated on a fairly regular basis. Additionally, note that the federal ozone standard was exceeded in 2003.

4.4.1 Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Table 2
Ambient Air Quality Monitoring Summary,
Northwest Coastal Los Angeles/Southwest Coastal Los Angeles Monitoring Stations[1]

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels During Such Violations				
	1999	2000	2001	2002	2003
Ozone					
State 1-Hour ≥ 0.09 ppm	4	2	1	1	11
Federal 1-Hour > 0.12 ppm	0	0	0	0	1
Federal 8-Hour > 0.08 ppm	0	0	0	0	1
Max. 1-Hour Conc. (ppm)	0.117	0.104	0.099	0.118	0.134
Max. 8-Hour Conc. (ppm)	0.082	0.079	0.080	0.077	0.104
Carbon Monoxide					
State 8-Hour > 9.0 ppm	0	0	0	0	0
Federal 8-Hour ≥ 9.5 ppm	0	0	0	0	0
Max. 8-Hour Conc. (ppm)	3.59	4.31	4.00	2.73	2.79
Nitrogen Dioxide					
State 1-Hour ≥ 0.25 ppm	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.133	0.162	0.109	0.113	0.119
Inhalable Particulates (PM_{10})					
State 24-Hour > 50 $\mu g/m^3$	6	9	8	12	3
Federal 24-Hour > 150 $\mu g/m^3$	0	0	0	0	0
Max. 24-Hour Conc. ($\mu g/m^3$)	69.0	74	75	121	58

[1] Ozone, carbon monoxide, and nitrogen dioxide are as monitored at the Northwest Coastal Los Angeles County station. Particulate matter is as monitored at the Southwest Coastal Los Angeles County station.
ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter
Source: California Air Resources Board

Residential areas are also considered to be sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Active recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

The dams and crossings to be removed are located within the Santa Monica Mountains Recreational Area. With the exception of the Keller House, which provides lodging for park personnel, no residents or sensitive land uses are located proximate to any of the seven structures to be removed. Furthermore, vehicular access to the park would be partially or fully closed during demolition activities.

Standards of Significance

Regional Emission Standards

The following significance thresholds for construction emissions have been established by the SCAQMD. Projects in the South Coast Air Basin with construction-related emissions that exceed any of these emission thresholds should be considered to be significant:

- 75 pounds per day of ROG
- 100 pounds per day of NOx
- 550 pounds per day of CO
- 150 pounds per day of PM_{10}
- 150 pounds per day of Sox

The daily operational emissions "significance" thresholds are:

- 55 pounds per day of ROG
- 55 pounds per day of NOx
- 550 pounds per day of CO
- 150 pounds per day of PM_{10}
- 150 pounds per day of Sox

Projects in the South Coast Air Basin with operation-related emissions that exceed any of the emission thresholds should be considered to be significant.

Local Emission Standards

- California State 1-hour CO standard of 20.0 ppm
- California State 8-hour CO standard of 9.0 ppm

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have significant impacts if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. The SCAQMD defines a measurable amount as 1.0 ppm or more for the 1-hour CO concentration by or 0.45 ppm or more for the 8-hour CO concentrations.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project conflict with or obstruct implementation of the applicable air quality plan?	☐	☑	☐	☐

Air emissions in the South Coast Air Basin are regulated by the SCAQMD. Individual projects are assessed as described below. The SCAQMD is required pursuant to the Clean Air Act to reduce emissions of criteria pollutants for which the SCAB is in non-attainment. Strategies to achieve these emissions reductions are developed in the Air Quality Management Plan (AQMP) prepared by SCAQMD for the region. The AQMP outlines regional programs and control measures to reduce future emissions based on population projections. The AQMP is based on Southern California Association of Governments (SCAG) projections as well as the requirements and projections included in the General Plans for those communities located within the South Coast Air Basin.

Individual projects and long-term programs within the region are required to be consistent with the AQMP. The project would not involve growth inducing impacts or cause an exceedance of established population or growth projections and is consistent with the existing and surrounding land uses. Furthermore, the project would not produce significant long-term quantities of criteria pollutants or violate ambient air quality standards. Additionally, the provided mitigation for short-term construction impacts would be mitigated to less than significant levels. Therefore, the project is consistent with the AQMP. No further mitigation measures, other than those specified for construction below, are necessary.

Mitigation Measures

Mitigation measures as presented in b) below shall apply.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☑	☐	☐

Air pollutant emissions associated with the project could occur over the short-term during site demolition activities. The project would not result in additional vehicle trips and no long-term emissions, or impacts, would occur.

Short-term Air Quality Impacts

Demolition activities would result in the generation of air pollutants. These emissions would primarily be (1) exhaust emissions from powered construction equipment, (2) dust generated from demolition, earthmoving, excavation, and other construction activities, and (3) motor vehicle emissions associated with vehicle trips. No asphalt, paints, or coatings would be applied.

The project includes the demolition of seven minor dams and crossings. A bridge could also be put in at the Keller House crossing. The bridge is either to be prefabricated or a flat railcar bridge and any construction associated with its installation would not exceed that generated by the heavy equipment used in the demolition effort.

An effort would be made to keep the park closed or partially closed to vehicular traffic on weekdays for no more than 30 days during demolition activities. This analysis assumes that the three check dams would be removed simultaneously over a two week period. This would be followed by the simultaneous removal of the four crossings, also estimated at two weeks in total. The analysis assumes that this demolition occurs in the fall of 2004.

Earthmoving and demolition activities will consume diesel fuel and thus produce combustion by-products. These construction emissions were estimated using the SCAQMD's URBEMIS2002 model (Version 7.4.2) and are included in Table III-2. Equipment use and vehicle trips are based on model default values for the South Coast Air Basin.

The analysis assumes that each of the dams/crossings occupies an area of 2,500 square feet. To determine the volume of materials to be removed during demolition, a depth/thickness of one foot is assumed. Based on this scenario, each dam/crossing would result in the demolition of 2,500 cubic feet or 93 cubic yards of material. This volume of material is assumed to be removed from each of the seven demolition sites and truck-use and dust are modeled based on this volume. Demolition would be accomplished using typical construction equipment as described below.

Dam 1. This dam would be demolished using a crane and wrecking ball. A bucket would be used to lift debris out to the road to a truck for transport. This material could then trucked to a proximate stockpile or removed to an offsite disposal facility. This analysis assumes offsite removal and the URBEMIS estimates this distance at 30 miles round trip fro all noted demolition. The creek would be dewatered using electric pumps. A generator is also assumed to power these pumps.

Dam 2. Demolition would occur using a hoe-ram, or rubber-tired backhoe fitted with a hydraulic ramming devise. A loader would be used to carry debris out of the channel to trucks for transport to the stockpile or to an offsite disposal point, as assumed in this analysis. A small bulldozer would be used for minor re-grading of the upstream channel. Channel dewatering would use the equipment noted for Dam 1.

Dam 3. This dam would also be demolished using a hoe-ram and a crane with wrecking ball. The wrecking ball would be replaced with a bucket to load the trucks. A loader would grade the channel banks. Channel dewatering would use the equipment noted for Dam 1.

Arizona Crossing 1. Demolition would occur using a hoe-ram as described above. A wheel loader would be used to carry debris out to a truck for transport to the stockpile or offsite disposal point, as assumed in this analysis. The channel would be dewatered using electric pumps and a generator is assumed to power these pumps.

Arizona Crossing 2. Demolition would occur using a hoe-ram as described above. A second backhoe would be used to lift the debris out of the creek and place it on the trucks for subsequent disposal offsite. Dewatering would occur using the electric pumps and generator noted for Arizona Crossing 1.

Arizona Crossing 3. Demolition would occur using a hoe-ram as described above. A wheel loader would be used to carry debris out to a truck for transport. The channel would be dewatered using electric pumps. A second generator is assumed to power these pumps.

Arizona Crossing 4. Demolition would occur using a jack hammers to break up the concrete. A compressor is assumed to power the jack hammers. A backhoe would be used to remove debris from the creek and deposit this material into a wheel loader that would carry the debris out to a truck for subsequent transport. This work would be accomplished “wet” and no dewatering is anticipated.

The results of the analysis are included in Table III-2. Note that simultaneous demolition of the three dams would not exceed the daily threshold values set forth by the SCAQMD for construction. However, simultaneous demolition of the four Arizona crossings could exceed the daily threshold for NOx and the impact is considered as potentially significant.

Table III-2
Projected Demolition Emissions (Lb/Day)

Source	CO	Nox	ROG	SOx	PM_{10}[1]
Demolition of Three Dams[2]					
Equipment & Worker Vehicles	78.4	72.1	9.8	0.0	3.7
SDAPCD Daily Threshold	550	100	75	150	150
Exceeds Threshold?	No	No	No	No	No
Demolition of Four Crossings					
Equipment, Worker Vehicles & Coatings	103.0	110.3	13.8	0.0	5.6
SDAPCD Daily Threshold	550	100	75	150	150
Exceeds Threshold?	No	Yes	No	No	No

[1] Includes PM_{10} for both exhaust and dust.
[2] Includes eight pieces of heavy equipment each operating 8 hours per day.
[3] Includes 11 pieces of heavy equipment each operating 8 hours per day.
Source: California Air Resources Board, URBEMIS2002: Version 7.4.2

Mitigation Measures

The provided analysis indicates that NOx emissions are projected to exceed the SCAQMD's threshold criterion and mitigation is warranted to reduce these emissions to less than significant. As such, the following measures shall be implemented.

- All heavy equipment shall be maintained in a proper state of tune as per the manufacturer's specifications.
- Heavy equipment shall not be allowed to remain idling for more than five minutes duration.
- Trucks shall not be allowed to remain idling for more than two minutes duration.
- Electric power supplied from the power grid shall be used to the exclusion of gasoline or diesel generators and compressors whenever feasible.
- Heavy equipment aggregate use shall not exceed 80 hours per day.
- The construction contractor shall log equipment use and a copy of the logs shall be retained at the project site for County inspection.

Level Of Significance After Mitigation: As noted in Table III-2, each piece of heavy equipment generates about 1.25 pounds of NOx per hour. A restriction to 80 hours use would then generate approximately 100 pounds per day. The other noted measures could further reduce emissions by one to two percent and the resultant levels would remain under the 100 pound-per-day threshold value reducing the impact to less than significant. Alternatively, if the generators and/or compressor are powered by electricity supplied from the grid, this would reduce NOx to less than a level of significance alleviating the need for the other measures.

Long-Term Air Quality Impacts

The project would not result in the generation of additional vehicle trips and no emissions are associated with the removed structures. As such, any potential impact is less than significant.

Microscale Projections

An impact is also potentially significant if emission levels exceed the State or federal ambient air quality standards. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Because project operations would not generate new vehicle trips, it would not create or add to any CO violations and any potential impact is less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state AAQS (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☑	☐	☐

The CEQA Guidelines require that projects be evaluated with respect to their contribution to the cumulative baseline conditions. This contribution with respect to air emissions would include both construction and operational emissions.

Cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well outside the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered, would cover an even larger area. Accordingly, the cumulative analysis for the project's air quality must be generic by nature.

The project area is out of attainment for ozone and PM_{10}. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the SCAB. The greatest cumulative impact on the quality of regional air cell will be the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects.

In accordance with the SCAQMD methodology, any project that is less than significant or can be mitigated to less than significant does not add significantly to the cumulative impact. Implementation of the noted mitigation measures would ensure that project construction does not exceed the daily threshold limitations reducing the impact to less than significant. This then also reduces the project's contribution to the cumulative impact to less than significant.

Mitigation Measures

Mitigation measures as presented in (b) above shall apply.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
d)	Would the project expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐

As described above in the microscale analysis, project operations would not add vehicles, increase local emissions, or create a condition whereby these emissions exceed the air quality standards. As such, no significant impacts related to sensitive receptors are anticipated to occur and no further mitigation measures are necessary.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
e)	Would the project create objectionable odors affecting a substantial number of people?	☐	☐	☑	☐

Project construction will involve the use of heavy equipment creating exhaust pollutants from onsite demolition and from trucks taking debris from the site. With regards to nuisance odors, any air quality impacts will be confined to the immediate vicinity of the equipment itself. By the time such emissions reach any sensitive receptor sites away from the project site, they will be diluted to well below any level of air quality concern. An occasional "whiff" of diesel exhaust from trucks accessing the site from public roadways may result. Such brief exhaust odors are an adverse, but not significant, air quality impact.

IV. BIOLOGICAL RESOURCES

Fauna

Solstice Canyon is a 550-acre park within the Santa Monica Mountains Recreation Area. Many resident and migratory species of birds and wildlife inhabit the Santa Monica Mountains Recreation Area, including 50 species of mammals, 384 species of birds, 25 species of reptiles, and up to 11 species of amphibians (NPS 2001). The Recreation Area supports a notable diversity of bird life, including raptors, shorebirds,

and songbirds. Other common wildlife include coyotes, mule deer, raccoons, cottontail rabbits, ground squirrels, western fence lizards, rattlesnakes and Pacific tree frogs, as well as numerous species of insects and other invertebrates (NPS 2001).

The streambed contains habitat that is suitable for southern steelhead (*Oncorhynchus mykiss)* and other native fish species, but, because of barriers, the habitat currently does not support a fish community (Spina and Johnson 1999). It supports a diversity of aquatic insects and amphibians, including a healthy population of California newts (*Taricha torosa*) and Pacific and California treefrogs (*Hyla regilla* and *Hyla cadaverina*).

Land birds in Solstice Canyon are monitored by the MAPS (Monitoring Avian Productivity and Survivorship Program). Birds are collected in mist nets between May and August. MAPS recorded 38 species of birds in Solstice Canyon in 2001 and 37 in 2002. The species captured in the greatest numbers were song sparrows (*Melospiza melodia*) and wrentits (*Chamaea fasciata*).

Table IV-1 lists ten sensitive animal species that have the potential to occur in the project area. Of these, two Federal Threatened species, southern steelhead (*Oncorynchus mykiss*) and tidewater goby (*Eucyclogobius newberryi*), have no potential to occur in the project area. Steelhead are precluded from accessing Solstice Creek by the various barriers. Tidewater gobies are an estuarine species that would not occur in the Solstice Creek stream habitat. They also would be precluded from accessing the creek by the barriers.

Bank swallows (*Riparia riparia*), a State threatened species, would not be expected in the project area because its habitat, vertical banks or cliffs for nesting, does not occur in the project area. Appropriate habitat exists in the vicinity of Solstice Creek for three California Species of Special Concern, San Diego desert woodrat (*Neotoma lepida intermedia*), and southwestern pond turtle (*Clemmys marmorata pallida*), but these species have not been observed in recent surveys by the NPS (NPS 2001). However, it should be noted that no focused surveys have been conducted for the woodrat. Anecdotal evidence suggests that pond turtles may have inhabited Solstice Canyon in the past. NPS surveys of Solstice Creek and adjacent streams and canyons have not found any individuals of the federal threatened California red-legged frog (*Rana aurora draytonii*). Similarly, the federal threatened/State endangered least Bell's vireo (*Vireo bellii pusillus*) has not been recorded in Solstice Canyon, although appropriate riparian habitat occurs. Three California Species of Special Concern, coast horned lizard (*Phrynosoma coronatum*), San Diego mountain kingsnake (*Lampropeltis zonata pulchra*) and two-striped garter snake (*Thamnophis hammondi*) occur in Solstice Canyon and potentially could occur in the project area.

Flora

The Recreation Area supports a variety of habitats including chaparral, coastal sage scrub, coast live oak woodland, valley oak savanna, salt marsh, riparian woodland, and non-native grassland (NPS 2001). Vegetation within the Solstice Canyon project area consists mainly of riparian woodland along the Solstice Canyon streambed and coastal sage scrub on the higher elevation upland.

The approximately 10 feet wide low flow channel of the Solstice Creek is characterized by unvegetated open water with a riparian cover dominated by white alder (*Alnus rhombifolia*), California laurel (*Umbellularia californica*), western sycamore (*Platanus racemosa*), and arroyo willow (*Salix lasiolepis*). Typical wetland plants along the edge of the creek include southern cattail (*Typha domingensis)*, giant horsetail (*Equisetum telmateia*), and various rushes such as *Juncus xiphioides* and *Juncus macrophyllus*. Common understory species along the creek are coyote brush (*Baccharis pilularis*), mule fat (*Baccharis salicifolia*), California blackberry (*Rubus ursinus*), and mugwort (*Artemisia douglasii*). Additionally, the regionally uncommon leather root (*Hoita machrostachya*), Durango root (*Datisca glomerata*) and Plummer's baccharis (*Baccharis plummerae* ssp. *plummerae*), a California Native Plant Society (CNPS) List 4 species, occur in several locations along the creek (NPS field survey, July 2004).

Table IV-1
Special Status Species and Critical Habitat of Potential Concern in Project Area

Common Name (Scientific Name)	Status*	Documented in Point Dume and/or Malibu Beach Quad?	Potential Presence in Project Area
Animals			
San Diego desert woodrat *(Neotoma lepida intermedia)*	CSC	Yes	**Moderate.** Inhabits coastal areas with moderate to dense canopies similar to habitat in project area; no nest/middens observed by biologists visiting the project sites but no focused surveys conducted
Least Bell's vireo *(Vireo bellii pusillus)*	FT, SE	No	**Low.** Has not been identified in project area or adjacent lands, but inhabits riparian areas similar to habitat in project area.
Bank swallow *(Riparia riparia)*	ST	Yes	**None.** Requires vertical banks/cliffs for nesting; no such habitat in area.
Southern steelhead *(Oncorhynchus mykiss)*	FT, CSC	Yes	**None.** Impediments in Solstice Creek prevent steelhead from accessing site.
Tidewater goby *(Eucyclogobius newberryi)*	FT, CSC	Yes	**None.** Inhabits coastal lagoons and lower reaches of streams; no such habitat in area.
Southwestern pond turtle *(Clemmys marmorata pallida)*	CSC	Yes	**Low.** Anecdotal evidence indicates this species may have inhabited Solstice Creek, although it has not been observed during recent surveys.
Coast horned lizard *(Phrynosoma coronatum)*	CSC	Yes	**Moderate.** Inhabits coastal sage scrub similar to habitat in project area.
San Diego mountain kingsnake *(Lampropeltis zonata pulchra)*	CSC	Yes	**Moderate.** Inhabits riparian and scrub similar to habitat in project area.
Two-striped garter snake *(Thamnophis hammondii)*	CSC	Yes	**Low.** NPS has not observed species in Solstice Canyon, although suitable habitat is present along creek.
California red-legged frog *(Rana aurora draytonii)*	FT	No	**Low.** Surveys of project area and adjacent streams/canyons have not discovered species.
California red-legged frog critical habitat	CH	Yes	**None.** Although other areas within the Recreation Area have been designated as critical habitat for the California red-legged frog, Solstice Canyon is not included within those areas (see "map unit 29" in USFWS, 2001).
Plants			
Malibu baccharis *(Baccharis malibuensis)*	CSC	Yes	**Low.** Requires volcanic substrates not present in project area; also not discovered during survey of project area.

Table IV-1
Special Status Species and Critical Habitat of Potential Concern in Project Area

Common Name (Scientific Name)	Status*	Documented in Point Dume and/or Malibu Beach Quad?	Potential Presence in Project Area
Santa Susana tarweed *(Deinandra minthornii)*	Rare	Yes	Documented in project area. Three plants are present immediately north of the rock retaining wall that borders northern edge of parking lot.
Lyon's pentachaeta *(Pentachaeta lyonii)*	FE, SE	Yes	**None.** Requires grasslands/chaparral not present in project area; also not discovered during survey of project area.
Coulter's saltbush *(Atriplex coulteri)*	CSC	Yes	**None.** Requires coastal bluffs not present in project area; also not discovered during survey of project area.
Blochman's dudleya *(Dudleya blochmaniae* ssp. *blochmaniae)*	CSC	Yes	**None.** Requires open, rocky slopes over serpentine soils not present in project area; also not discovered during survey of project area.
Marcescent dudleya *(Dudleya cymosa* ssp. *marcescens)*	FT, Rare	Yes	**None.** Requires rock surfaces and/or rocky volcanic cliffs not present in project area; also not discovered during survey of project area.
Santa Monica Mountains dudleya *(Dudleya cymosa* ssp. *ovatifolia)*	FT, CSC	Yes	**None.** Requires rocky outcrops and/or volcanic cliffs not present in project area; also not discovered during survey of project area.
Braunton's milkvetch *(Astragalus brauntonii)*	FE, CSC	Yes	**None.** Inhabits disturbed areas in chaparral (Hickman 1993) overlying granite or limestone not present in project area; also not discovered during survey of project area.
Parry's spineflower *(Chorizanthe parryi* var. *parryi)*	CSC	Yes	**Low.** NPS has not observed species in Solstice Canyon, and project area is below typical elevational range for species (Hickman 1993); however, suitable coastal scrub habitat exists in area.
Plummer's mariposa lily *(Calochortus plummerae)*	CSC	Yes	**Low.** NPS has not observed species in Solstice Canyon, although suitable coastal scrub habitat exists in area.
Sonoran maiden fern *(Thelypteris puberula* var. *sonorensis)*	CSC	Yes	**Low.** NPS has not observed species in Solstice Canyon, and project area is below typical elevational range for species (Hickman 1993); however, suitable riparian habitat exists in area.

***Status key:**
CH = federally designated critical habitat
CSC = California Species of Special Concern
FE = federally listed as endangered
FT = federally listed as threatened
Rare = state listed as rare
SE = state listed as endangered
ST = state listed as threatened

The creek bank transitions abruptly to uplands dominated on the lower slopes by stands of southern oak (*Quercus agrifolia*) and patches of California black walnut (*Juglans californica*), both with an understory of California blackberry and poison oak (*Toxicodendron californica*). On the higher, north facing slopes, the riparian woodland gives way to a mosaic of California black walnut and laurel sumac (*Malosma laurina*) intermixed with coastal sage scrub dominated by purple sage (*Salvia leucophylla*), California sagebrush (*Artemisia californica*), sticky monkey flower (*Mimulus aurantiacus*), and giant wild rye (*Leymus condensatus*). The southerly facing slopes of the canyon are dominated by laurel sumac and bush mallow (*Malacothamnus fasciculatus*) transitioning to black sage (*Salvia mellifera*) and ashy leaved buckwheat (*Eriogonum cinereum)* interspersed with foothill needlegrass (*Nassella lepida*).

The major non-native species occurring in the Solstice Canyon riparian corridor are umbrella plant (*Cyperus involucratus*), poison hemlock (*Conium maculatum*), spurge (*Euphorbia terracina*), fennel (*Foeniculum vulgar*), and castor bean (*Ricinus communis*).

Appendix A lists the species occurring at the dam and Arizona crossing locations.

Table IV-1 lists sensitive species that potentially could occur in the project area. This table includes information from sensitive species surveys performed by NPS in 2001 for the previous removal of a stream crossing and parking lot expansion (NPS 2001) and from a survey for this project performed in July 2004.

A total of 11 sensitive plant species have been documented in the Point Dume/Malibu Beach area (NPS 2001). Most of these species have not been observed in Solstice Canyon and have little potential to occur in the project area due to lack of suitable habitat.

During the surveys for the parking lot expansion, three individuals of Santa Susana tarweed (*Deinandra minthornii*), listed as Rare by the State of California, were observed north of the retaining wall that borders the northern edge of the parking lot (NPS 2001). NPS believes this species was introduced to Solstice Canyon by the CNPS while trying to create an outdoor nursery in the canyon (J. Tiszler, NPS, personal communication, July 7, 2004). The riparian habitat in the project area is unlikely to support this species.

A single individual of Malibu baccharis (*Baccharis malibuensis*), a California Species of Special Concern, has been reported by reliable sources to occur in Solstice Canyon. NPS personnel have looked for it and failed to find it (J. Tiszler, NPS, personal communication, July 7, 2004). The reported sighting is well outside the project area. The species was not observed in the project area in a July 2004 survey.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project 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 or U.S. Fish and Wildlife Service?	☐	☐	☑	☐

Complete removal of check dams and Arizona crossings would temporarily disturb biological resources in the immediate vicinity of the structures. No habitat would be disturbed to access the streambed during removal of Dam 1 or Arizona Crossing 3 because the removals would be accomplished by equipment working from the road. However, a large alder directly behind Dam 1 would be lost by dam removal. Removal of the side wall of Dam 1 also will result in the loss of some riparian vegetation.

Native habitat would not be disturbed during removal of the Keller House Crossing because this crossing is on the main road. A small amount of riparian vegetation (less than 0.1 acre) may be disturbed temporarily to access the streambed for removal of Dams 2 and 3 and Arizona crossings 2 and 4. To access Check Dam 3, two mature sycamore trees may need to be removed from the north bank and an alder may need to be removed on the south bank. A biologist will select access routes that minimize disturbance to native vegetation. Disturbed areas will be revegetated if necessary.

Although no sensitive species are known to occur in the project area, there is a slight potential that disturbance of a portion of the stream bank to access the stream for removal of Dams 2 and 3 and Arizona crossings 2 and 4 could disturb a sensitive plant species or a San Diego desert woodrat nest. However, a biologist will survey the area and identify an access route that avoids sensitive species and minimizes disturbance of riparian vegetation. Therefore, adverse impacts to sensitive species would not occur. A small amount of breeding habitat for California newts and tree frogs would be disturbed during the process of removing the dams and road crossings.

If none of the sediment behind the dams were removed, the large amount of sediment behind Dams 1 and 3 would be permitted to move downstream. Downstream movement of sediments stored behind the check dams would temporarily disturb downstream habitat, but this sediment would gradually be moved downstream by natural processes. This sediment may temporarily fill the pools in front of the dam that provide good habitat for newts. Natural processes will move the sediment downstream and the pools will re-establish. A considerable amount of spawning sized gravel is contained in the sediment behind the dams. The introduction of these gravels into the streambed would be beneficial for steelhead spawning. Removal of some of the sediments behind the dam would reduce the temporary impacts of the release of sediments on downstream habitat. However, removal of sediments would also remove spawning gravel that would benefit spawning activities of southern steelhead.

The only permanent modification of habitat that would occur is the removal of Arizona crossings and check dams that prevent the upstream movement of native fishes. When this project is completed and the downstream barriers at Pacific Coast Highway and Corral Canyon are removed, the federal threatened southern steelhead will have access to Solstice Creek from the ocean to the waterfall by Tropical Terrace. Therefore, the proposed project would, in combination with removal of the downstream barriers, have a substantial beneficial effect on the southern steelhead.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☑	No Impact ☐

No permanent adverse impacts to sensitive habitats would occur. A small amount of riparian habitat would be disturbed on the stream bank to access the stream for removal of check dams 2 and 3 and Arizona crossings 2 and 4. In addition, an alder and some riparian habitat would be lost when Dam 1 is removed. For each access area, a biologist will select the route that disturbs the least amount of vegetation and that avoids disturbance to trees to the extent possible. If significant disturbance occurs, the area will be revegetated.

c) Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☑	No Impact ☐

The proposed project would temporarily disturb Waters of the United States and potentially some jurisdictional wetlands during the process of removing the check dams and Arizona crossings. A small amount of riparian vegetation (less than 0.1 acre) under the jurisdiction of the California Department of Fish and Game may be disturbed temporarily to access the streambed for removal of check dams 2 and 3 and Arizona crossings 2 and 4. A biologist will select access routes that minimize disturbance to native vegetation. Disturbed areas will be revegetated if necessary.

Downstream movement of sediments stored behind the check dams would disturb temporarily downstream habitat, but this sediment would gradually be moved downstream by natural processes. If some of the sediment is removed, the temporary disturbance of downstream sediment movement would be reduced.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
d)	Would the project 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?	☐	☐	☑	☐

A small amount of breeding habitat for California newts and tree frogs would be disturbed during the process of removing the dams and road crossings. If none of the sediment behind the dams is removed, the large amount of sediment behind check dams 1 and 3 would be permitted to all move downstream. This sediment may temporarily fill the pools in front of the dam that provide good habitat for newts. Natural processes will move the sediment downstream and the pools will re-establish. A considerable amount of spawning sized gravel is contained in the sediment behind the dams. The introduction of these gravels into the streambed would be beneficial for steelhead spawning. Removal of some of the sediments behind the dam would reduce the temporary impacts of the release of sediments on downstream habitat. However, removal of sediments would also remove spawning gravel that would benefit spawning activities of southern steelhead.

Upon completion of the project, movement of fishes and amphibians along the streambed will be facilities because barriers to movement would have been removed. When the two lowest barriers are removed in the future, southern steelhead would have access to suitable breeding habitat. The long-term impact of the proposed project would result in a substantial benefit to fish and amphibian movement.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
e)	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑

The proposed project is consistent with the General Management Plan for the Santa Monica Mountains Recreation Area that identifies restoration of steelhead to the Santa Monica mountains as an objective.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
f)	Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

The proposed project is consistent with plans by the National Marine Fisheries Service to restore southern steelhead to southern California streams.

V. CULTURAL RESOURCES

History

The Chumash Native American Indian group occupied Solstice Canyon, and Loxostoxni was a major Chumash village located at the mouth of Solstice Canyon. It functioned as a traditional Chumash village until about 1800 and is now represented by a series of functionally related archaeological sites beginning at the coast and continuing up Solstice Creek to the area of the Keller House.

Lower Solstice Canyon was once part of the vast Rancho Topanga Malibu Sequit. The rancho was first granted to Jose Bartolome Tapia in 1805. Eventually ownership of the rancho passed to Matthew Keller, who, like the rancho owners before him, stocked his land with cattle and built a house in Malibu Canyon. Keller's son Henry inherited the rancho but eventually sold it to Frederick and May K. Rindge in 1892. However, Henry Keller was so fond of Solstice Canyon that, after he sold the rancho, he purchased a squatter's cabin in Solstice Canyon. The "Keller House," as it is still referred to today, was used as a hunting lodge by the family until the 1930s. By this time the Rindge family was under heavy financial pressure to break up the rancho, and individual parcels of land were sold off.

In 1937, Fred and Florence Roberts purchased their first parcel in Solstice Canyon and constructed a log cabin along the creek, with a barn, pool, and a dam in the creek. By 1947 the Roberts owned the majority of Solstice Canyon from the source spring of the stream to Malibu Road near the coast. They built a house in 1952 after deciding to live in the canyon full time.

After Fred Roberts passed away in 1976, the ranch was not cared for as it had been while he was alive. In 1982, a disastrous fire swept through the canyon, destroying the house, several other structures, and acres of vegetation in the canyon.

Potential National Register Eligibility: Owner of a regional chain of grocery stores and liquor stores, Fred Roberts would be locally significant in Malibu and Santa Monica for his marketing ingenuity, his philanthropy, and role in the community. However, his Solstice ranch and home are not fundamentally linked to his business success. The ranch landscape associated with the Roberts period is represented by fragments. The 1982 fire and 1983 flood, and subsequent neglect leave little to use to visualize the ranch landscape. The main house, barns, corrals, fences and other landscape features were destroyed and are now overgrown with natural vegetation. Some of the remaining visible features of the ranching landscape are Keller House, the Solstice Road alignment, the hardened Arizona crossings in and attaching to the road, and the dams in the creek.

Historic Resources

Solstice Road may have been the first and was certainly among the first of three lateral roads—the others being Malibu and Los Aliso (Decker)—developed off the Malibu trail, which, at the time (c. 1895), mostly followed the wet sand on the beach. There is evidence that Solstice Road was graded in 1894 and was in use by 1886. The road appears on a U.S. Geographic Survey (USGS) 15' topographic map published in 1903. The alignment has not changed over time because of the steep walls of the canyon. Although the National Register eligibility of the road has not been formally evaluated, the alignment would appear to be the primary character-defining feature meriting preservation consideration. We believe we already have sufficient information to assume that the Solstice Road alignment is potentially eligible to the National Register of Historic Places and expect to nominate it as part of the forthcoming Historic Resources Study. In the meantime, we assume that the Solstice Road alignment is eligible.

Two of the hardened Arizona crossings proposed for removal (Arizona Crossings 2 and 3) were installed at wet crossings in the Solstice Road alignment in about 1947 by Fred Roberts, the property owner at the time. The wet crossings are shown on the 1903 USGS 15' topographic map. Then subsequently (probably in 1950), Roberts constructed a bypass road past the Arizona crossings. This is the access road used currently. The Arizona crossings were severely damaged in the 1983 floods and are currently not usable. Removal of the damaged crossings and restoration of wet crossings would restore the road to its historic condition from 1886 to 1947 and not have an adverse effect on the road alignment or character.

Two of the hardened Arizona crossings proposed for removal cannot be dated with certainty. Crossing 1 is a lateral to the "Keller" House. Keller used this structure as a hunting cabin until the 1930s and there was apparently no streambed crossing during this time. The Roberts put in a hardened Arizona crossing—possibly about 1947 when they first acquired the property. This crossing was severely damaged in the 1982 fire and 1983 floods and was replaced in 1988 by the Santa Monica Mountains

Conservancy. This crossing is not considered historic or significant and replacing it with a bridge will not have an adverse effect on Solstice Road. The new bridge will not affect the Keller House and will be closer to the historic setting.

Another lateral Arizona crossing (Arizona Crossing 4) led to the barn near the main house. This crossing was not shown on a map of ranch roads dating to about 1960, so it apparently did not exist at that time. This crossing is not considered to be historic. Additionally, it was completely destroyed in the 1983 floods. The access road in and out of the stream is barely detectable now. Large concrete slabs scattered downstream are remnants of the concrete from the crossing.

Between 1938 and 1947, Roberts apparently installed the three dams now proposed for removal in Solstice Creek. Although these dams are associated with the Roberts era in Solstice Canyon from about 1938, the ranching landscape of the Roberts era now lacks integrity. The house, barns, corrals, many associated structures, and fences were destroyed during fire in 1982, flood in 1983, and subsequent neglect and inappropriate management. The dams to be removed represent mid-20th century fragments of the Roberts era but do not, by themselves, have inherent technical or esthetic merit. The dams are reported to have quickly filled with silt and became nonfunctional. Dam 3 used wood gates to control the pond level but these gates burned in the 1982 fire. The dams have lost integrity and no longer function as designed. These structures are no longer reflective of any historic significance of the Roberts period.

Archaeological Resources

Within the Area of Potential Effect there are two small archaeological sites near the road that were discovered during monitoring for an earlier rehabilitation project. They will not be affected by the dam and crossing removal actions. It is possible that displaced archaeological artifacts may be trapped in the sediments behind the dams but these artifacts will lack provenance. In spite of extensive archaeological surveying, there are no known archaeological sites at the locations of ground disturbance. However, it is possible that intact archaeological deposits may be encountered in the stream banks that will be exposed as a result of removing dams or crossings. Because of this potential, professional archaeologists will monitor all ground disturbances. Procedures to be followed in the event of inadvertent discoveries are defined in a Memorandum of Agreement between NPS and the California State Historic Preservation Office that is in place from the previous rehabilitation project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☑	☐

Many historic structures in Solstice Canyon have become historic archaeological sites. This project will have negligible impacts on these historic archaeological sites, and none of them are included in the Area of Potential Effect.

The historic Keller House is assumed to be eligible to the National Register of Historic Places. Removal of the non-historic Arizona crossing and replacing it with a bridge will have negligible effects on the Keller House or its setting as the Keller House is outside the Area of Potential Effect.

The project would have no impact on known cultural and historic resources in the Area of Potential Effect or in Solstice Canyon. Identified potential historic properties would be unimpaired. Although project-related ground disturbance has the potential to impact undiscovered archaeological resources, ground disturbance will be monitored by a professional archaeologist with authority to stop construction until the resources can be evaluated. The park has an existing Memorandum of Agreement if inadvertent discoveries occur. Historic structures would not be altered.

The dams in Solstice Creek no longer function as designed and do not have significance by themselves. The dams are not contributing elements to a cultural landscape. The cultural landscape of the Roberts Ranch is not significantly associated with the accomplishments of Fred Roberts. It lost integrity when the house, barns, fences, and other structures were destroyed during the fire in 1982 and the flood in 1983, and subsequent neglect. Therefore removing the dams will not impair a cultural resource.

The Arizona crossings from the road alignment to be removed will have a minor but not adverse effect on the Solstice Road, which is presumed to be eligible. Removal of the crossings will actually restore the historic condition of the road. Removal of the non-historic crossings will have a negligible impact on the road alignment. Only the road near the project footprint is included in the Area of Potential Effect.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☑	☐

There are archaeological sites within the project area but project activities will have negligible effects on known archaeological sites. There is a possibility that archaeological resources are concealed by the dam shoulders and may be revealed during removal. The NPS has an existing Memorandum of Agreement for inadvertent discoveries in Solstice Canyon. Therefore the known archaeological sites were not automatically included in the Area of Potential Effect. Ground disturbance will be monitored by a professional archaeologist with authority to stop construction until any previously undiscovered archaeological resources can be evaluated. The park has an existing Memorandum of Agreement if inadvertent discoveries occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☑

All excavation necessary for the project would be in recent alluvium. The project does not involve excavation into geologic formations and therefore would not destroy paleontological resources or geologic features.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
d)	Would the project disturb any human remains, including those interred outside of formal cemeteries?	☐	☑	☐	☐

There are no known burials in the vicinity of the structures to be removed. There is a potential that burials could be encountered during the work effort. Monitoring by an archaeologist of the minor ground disturbing activities needed for the project and adherence to the requirements of the Native American Graves Protection and Repatriation Act (NAGPRA) and state law will reduce any potential impacts to less than significant.

Mitigation Measures

Monitoring by an archaeologist of the minor ground disturbing activities needed for the project and adherence to the requirements of the Native American Graves Protection and Repatriation Act (NAGPRA) and state law will reduce any potential impacts to less than significant.

VI. GEOLOGY AND SOILS

The main soil association throughout Solstice Canyon is the Chumash-Boades-Malibu Association; the canyon bottom supports a Fluvaquents-Riverwash complex (US DOI, NPS 2001). The Chumash-Boades-Malibu Association is derived from shale and sandstone rock sources. Although the characteristics vary by soil type, typical soil profiles include upper horizons of brown loam (yellowish brown gravelly loam in the case of Chumash soil) underlain by fractured, bedded shale at depths of seven to 27 inches. Malibu soil supports an intermediate layer of reddish brown clay at typical depths ranging from 19 to 27 inches. Volcanic, rock outcrops form common inclusions in this association.

Fluvaquents in the project area consist of very deep, very poorly drained soils that formed in alluvium on low floodplains. The topmost horizon in fluvaquents-riverwash typically supports a litter of leaves and twigs underlain by grayish brown loam. The loam layer transitions into sandy loam underlain by extremely gravelly sand on top of gravelly coarse sand at a depth of 48 to 55 inches.

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
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.	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☑

The removal of the check dams and Arizona crossings would not expose people or structures to impacts, involving earth movement.

ii) Strong seismic ground shaking?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☑

The removal of the check dams and Arizona crossings would not expose people or structures to impacts, involving earth movement due to ground shaking.

iii) Seismic-related ground failure, including liquefaction?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☑

The removal of the check dams and Arizona crossings would not expose people or structures to impacts, involving liquefaction.

iv) Landslides?	Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
	☐	☐	☐	☑

Removal of the check dams and Arizona crossings would result in a recontouring of the landscape. No potential for landsliding in the area where structures are removed would occur.

b) Would the project result in substantial soil erosion or the loss of topsoil?	Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
	☐	☐	☑	☐

Removal of the check dams and Arizona crossings would result in a recontouring of the landscape. There may be a small potential for topsoil erosion in the area where structures are removed. However, such a small area would be disturbed that impacts would be less than significant.

c) Would the project 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
	☐	☐	☐	☑

The project components would not be located on unstable geologic units. The project would not cause the area to become unstable. There is no potential for landsliding, lateral spreading, subsidence, liquefaction or collapse.

d) Would the project 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?	Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
	☐	☐	☐	☑

The project would not be located on expansive soil where structures (buildings) would be located.

e) Would the project 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?	Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
	☐	☐	☐	☑

The soils structure of the project areas will not change. The project would not result in soils being incapable of supporting septic tanks or other wastewater treatment systems. No such facilities would be constructed in the stream.

VII. HAZARDS AND HAZARDOUS MATERIALS

The project area is National Park Service land. No hazards or hazardous materials exist.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☑

No transport of hazardous materials is associated with the project. Emissions from construction equipment are addressed under Air Quality.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Would the project 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?	☐	☐	☐	☑

The project would only use diesel fuels for construction equipment. No other hazardous materials would be associated with construction. Diesel fuel may spill into the waterway. The impact and mitigation is discussed under Hydrology/Water Quality.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑

No schools are located within one-quarter mile of the park are. No impacts would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
d)	Would the project 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?	☐	☐	☐	☑

There are no hazardous materials sites within the park.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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?	☐	☐	☐	☑

The project is not located within an airport land use plan.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	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?	☐	☐	☐	☑

The project is not located within the vicinity of a private airstrip.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
g)	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑

The project is temporary construction, which would have no impact on local emergency response planning.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
h)	Would the project 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?	☐	☑	☐	☐

Solstice Canyon Park is bordered by residential areas along the upper edge of the canyon. Construction activities could temporarily increase the likelihood for fires to occur especially near dry vegetation. Fires could be generated from construction equipment or carelessness. Construction crews would be using a rage of gasoline and diesel-powered equipment which can produce sparks and pose a fire threat. While people and structures are not immediately proximate to the proposed work areas, wildfires can spread rapidly.

In a typical weather year, the potential for fires increases as the hot summer months turn to fall. The proposed project is scheduled for construction in September and October, a high fire season, combined with low rainfall totals during recent years.

Contractors are generally responsible for preventing fires. Fire prevention and suppression provisions would be included in construction contracts. The provisions include equipment and training required for contractors, as well as procedures for attacking fires if they occur during construction activities. The provisions also include the methods and requirements designed to prevent fires. Fire management mitigation measures shall be included as part of construction specifications.

Mitigation Measures

- Fire management mitigation measures shall be included as part of construction specifications.
- The contractor shall clear dry brush areas prior to construction.
- The contractor shall be required to have firefighting tools (such as shovels, extinguishers, water tanks, and pumps) on hand during all construction activities.
- The contractor shall have spark arrestors on engines and flues.
- If a fire starts, the contractor's employees shall immediately begin fire control efforts and immediately report all fires to the RCD and NPS.
- The contractor's staff shall not be allowed to smoke onsite, other than in specifically allowed areas.

VIII. HYDROLOGY AND WATER QUALITY

Solstice Creek is a spring-fed stream that drains about 4.4 square miles of steep terrain in the Santa Monica Mountains (Klein et al. 2002). Solstice Creek is fairly steep, with gradients in the project area downstream of Tropical Terrace that range from 2 to 6 percent and average about 4 percent. Bed material consists of a wide range of particle sizes, from small sand deposits to large boulders. A study of sediments stored behind the barriers determined that a representative distribution of sediment size was approximately 40% boulders, 30% cobbles, 10% gravel, and 20% fines (Roche and Kearns 2002). Episodic, large-magnitude mud and debris flows that occur in response to wildfire are a dominant geomorphic process in the area. Solstice Creek is subject to alternating cycles of massive sediment transport and deposition followed by periods of fluvial reworking and scour (Klein et al. 2002).

Water quality in Solstice Creek is generally good but varies seasonally (NPS 2001). Most of the Solstice Creek watershed above the Pacific Coast Highway is undeveloped. Seven structures currently exist in the canyon. All of these are owned and maintained by NPS. Due to the absence of residential and urban development in Solstice Canyon, the stream is relatively free of herbicides, fertilizers, and other pollutants common to other drainages in the Santa Monica Mountains.

Water quality in Solstice Creek is most strongly affected by seasonal storms that greatly increase the volume of flow in the creek (NPS 2001). These heavy flows associated with seasonal storms mobilize sediments and debris in the creek. During these storm flows, turbidity in Solstice Creek is elevated and water quality is temporally reduced.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project violate any water quality standards or waste discharge requirements?	☐	☐	☑	☐

During the removal of the check dams and Arizona crossings, water would be piped around the construction site. Therefore, dam and crossing demolition would occur in the dry, and disturbance of sediments during the removal process would not elevate turbidity downstream, nor would dam and road crossing removal have any potential to introduce contaminants to the creek. Dewatering would not occur during the removal of Arizona Crossing 4 because the amount of work required to remove this crossing is minor, and minimal disturbance to the streambed would occur. There may be some disturbance of sediments causing a slight temporary elevation in turbidity during removal of Arizona Crossing 4. However, removal of this road crossing involves minimal work and any resuspension of sediments would be minor and temporary. During all work associated with this project, standard construction Best Management Practices (BMPs) (such as handling of fuels and other hazardous substances in locations where there is no potential for runoff into the streambed) would be implemented.

After the check dams are removed (especially Dams 1 and 3), sediments stored behind these dams will move downstream. The resuspension of the fines in these sediments will elevate turbidity in the creek. However, the movement of fines would occur during stormy periods of high flow when turbidity is elevated naturally. When flows subside, fine sediments would settle, and turbidity in the creek would return to normal. Removal of the check dams would not result in turbidity levels substantially higher than natural conditions. The objectives in the Water Quality Control Plan for the Los Angeles Region (RWQCB 1994) is that changes in turbidity should not cause a nuisance or adversely affect beneficial uses and should not result in an exceedance over natural turbidity levels of 20 percent. Removal of the check dams would not result in a violation of these objectives. Partial removal of sediments behind check dams potentially could result in lower turbidity levels during very high flows than no sediment removal because there would be a smaller volume of sediment to be suspended. However, turbidity related to sediments behind the check dams would be masked by the natural turbidity that occurs during high-flow storm events.

b)	Would the project 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)?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☑

The removal of check dams and Arizona crossings from Solstice Creek will have no effect on groundwater.

c)	Would the project 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 offsite?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☑	No Impact ☐

Removal of check dams and Arizona crossings would not alter the drainage pattern of Solstice Creek. After removal of the dams, grading will occur as necessary to insure that removal of the dams does not result in scour or undercutting of the streambanks.

When the dams are removed, sediments stored behind the dams would gradually move downstream. Sediments may temporarily fill downstream pools but pools would reestablish as high flow events continue to transport sediments downstream. The temporary impacts of the sediment stored behind the dams on downstream reaches of Solstice Creek might be reduced by the alternative to only remove part of the sediment. However, Roche and Kearns (2002) analyzed the particle size distribution of sediments stored behind the check dams and the Keller House crossing and determined that removal of the dams and crossing without any removal of stored sediments would be unlikely to cause sediment transport significantly above natural sediment fluxes.

d)	Would the project 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 that would result in flooding on- or offsite?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☑

Removal of check dams and Arizona crossings would not alter the course of Solstice Creek or affect its drainage pattern. Removal of these structures would have no affect on the rate or amount of surface runoff and would not cause flooding.

e)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☑

The removal of check dams and Arizona crossings on Solstice Creek would not create or contribute runoff. The proposed project would have no effect on stormwater drainage.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
f)	Would the project otherwise substantially degrade water quality?	☐	☐	☑	☐

With the exception of Arizona crossing 4, creek water would be piped around the structures during the removal process. Therefore disturbance of sediments during removal operations would not degrade water quality in the stream. There may be some disturbance of sediments causing a slight temporary elevation in turbidity during removal of Arizona crossing 4. However, removal of this road crossing involves minimal work and any resuspension of sediments would be minor and temporary. During all work associated with this project, standard construction BMPs (such as handling of fuels and other hazardous substances in locations where there is no potential for runoff into the streambed) would be implemented.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
g)	Would the project 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?	☐	☐	☐	☑

The proposed project does not involve the construction of any housing.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
h)	Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☑

The proposed project would not involve the construction of any structures.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
i)	Would the project 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?	☐	☐	☐	☑

The removal of check dams and Arizona crossings on Solstice Creek would not expose people or structures to a risk of flooding.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
j)	Would the project expose people to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

The removal of check dams and Arizona crossings on Solstice Creek would not expose people to inundation by seiche, tsunami, or mudflow.

IX. LAND USE AND PLANNING

The land is National Park Service land, designated on local planning documentation as Federal lands.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project physically divide an established community?	☐	☐	☐	☑

The proposed project site is in a National Park used heavily for recreation. There would be no division of an established community. Therefore not impacts would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Would the project 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?	☐	☐	☐	☑

The project only involves the reduction/elimination of manmade fish barriers. The project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over it. Therefore no impacts would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☑

No changes would occur that would affect habitats or natural communities. The small projects that comprise the proposed project would not conflict with any applicable habitat conservation plan or natural community plan. No impacts would result.

X. MINERAL RESOURCES

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project 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?	☐	☐	☐	☑

There are no known mineral resource that would be of value in Solstice Canyon. Therefore no loss of an available mineral could occur. No impacts would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Would the project 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?	☐	☐	☐	☑

There is no known resource of a locally-important mineral recovery site delineated on a local general plan, specific plan or other land use plan. Therefore no impacts would result.

XI. NOISE

The project area is located in an isolated approximately one-mile-long canyon, 1,000 feet north of Pacific Coast Highway. With the exception of the onsite Keller House, which provides lodging for park personnel, the nearest inhabited house is approximately 500 feet south of the entrance gate at Pacific Coast Highway. Other houses abut the edge of the park boundary; the nearest of these is more than ½ mile from the individual project elements.

The dominant noise sources in the park are park visitors and the vehicular traffic, most dominant near the visitor center. Otherwise, the park is characterized by natural sounds of wind and wildlife. The draft general management plan prepared by NPS in 2000 projected most areas of the park at 50 decibels (dBs).

While no noise measurements were obtained at the project sites, past noise measurements obtained on July 22, 2003 for the renovation of the Santa Ynez Reservoir, located in Topanga State Park to the east, would be representative of uninhabited forest area. Noise measurements obtained near the Santa Ynez

Reservoir ranged from the low to high 40's dBA Leq depending upon the proximity to Palisades Drive. Based on the fact that no major roadways are located along Solstice Creek in the vicinity of the proposed demolition, onsite noise levels would be in the low 40's dBA.

The generation of noise associated with the project would occur over the short-term from demolition activities. This demolition would occur at seven separate locations over a period of about one month. Once demolition is completed, the project would not add additional vehicles to the roadway nor generate stationary-source noise.

Standards of Significance

Noise impacts can be broken down into three categories. The first is "audible" impacts, which refers to increases in noise level that are perceptible to humans. Audible increases in noise levels generally refer to a change of 3 dBA or more since this level has been found to be barely perceptible in exterior environments. The second category, "potentially audible," refers to a change in noise level between 1 and 3 dBA. This range of noise levels was found to be noticeable to sensitive people in laboratory environments. The last category includes changes in noise level of less than 1 dBA that are typically "inaudible" to the human ear except under quiet conditions in controlled environments. Only "audible" changes in noise levels at sensitive receptor locations are considered potentially significant.

For stationary sources, the applicable noise standards include criteria established by local as well as any State regulations applicable to the proposed project. Mobile-source noise (i.e., vehicle noise) is preempted from local regulation. Here an impact is considered significant if the project were to increase this noise level by 3 dBA CNEL (barely noticeable in an exterior environment).

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project result in 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?	☐	☐	☑	☐

An impact could be significant if the project would site sensitive land use in a location where noise levels would exceed the appropriate standards. The project includes the demolition of various small dams and Arizona crossings within the Santa Monica Mountains National Recreation Area, operated by the National Park Service. The existing land is designated as national park and no noise sensitive land uses are located proximate to the project site. Additionally, see (d) below.

Workers exposed to onsite noise during demolition activities would be subject to the requirements for worker safety and hearing conservation as dictated under the Occupational Safety and Health Administration (OSHA) and any potential impacts to onsite receptors would be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☑	☐

The project involves the demolition of existing dams and crossings using common heavy equipment. Demolition would involve the use of a wrecking ball to remove existing concrete. Caltrans notes that ground borne vibration is typically associated with blasting operations and the use of pile drivers, neither of which are anticipated for the demolition effort. As such, no excessive ground borne vibrations would be created by the proposed project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑

The project involves minor demolition of existing stone and concrete structures. Total time for the demolition is not to exceed one month. No subsequent noise is associated with the removed materials nor would the project add new vehicle trips to the recreation area and no long-term increase in noise would occur as a result of the project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
d)	Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑	☐

Noise levels associated with demolition activities would be higher than the ambient noise levels in the project area today, but would subside once demolition is completed. Two types of noise impacts could occur during demolition activities. First, the transport of workers and equipment to the construction site and removal of debris would incrementally increase noise levels along site access roadways. Even though there could be a relatively high single event noise exposure potential with passing trucks (a maximum noise level of 86 dBA at 50 feet), the increase in noise would be less than 1 dBA when averaged over a 24-hour period, and would therefore have a less than significant impact on noise receptors along the truck routes.

The second type of impact is related to noise generated by onsite heavy equipment operations. Table XI-1 lists typical construction equipment noise levels recommended for noise impact assessment at a distance of 50 feet.

Noise ranges have been found to be similar during all phases of construction, although the actual construction of structures typically results in less noise than site preparation activities. The grading and site preparation phase tends to create the highest noise levels because the noisiest construction equipment is found in the earthmoving equipment category. This category includes excavating machinery (backfillers, bulldozers, draglines, front loaders, etc.) and earthmoving and compacting equipment (compactors, scrapers, graders, etc.). Typical operating cycles may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Noise levels at 50 feet from earthmoving equipment range from 73 to 96 dBA, while Leq noise levels range up to about 89 dBA.

Table XI-1
Demolition and Construction Equipment Source Noise Levels

Equipment Type	Typical Equipment at 50 ft. (in dBA)	Quieted Equipment at 50 ft. (in dBA)[a]
Air Compressor	81	71
Backhoe	85	80
Concrete Pump	82	80
Concrete Vibrator	76	70
Concrete Breaker	82	75
Truck Crane	88	80
Dozer	87	83
Generator	78	71
Loader	84	80
Paver	88	80
Pneumatic Tools	85	75
Water Pump	76	71
Power Hand Saw	78	70
Shovel	82	80
Trucks	88	83

Source: Bolt, Beranek, and Newman, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, U.S. Environmental Protection Agency*, 1971.
Notes: [a] Quieted equipment can be designed with enclosures, mufflers, or other noise-reducing features.

Composite construction noise is best characterized by Bolt, Beranek and Newman (USEPA December 31, 1971). In their study, construction noise for commercial development is presented as 89 dBA Leq when measured at a distance of 50 feet from the construction effort. This value takes into account both the number of pieces and spacing of the heavy equipment used in the construction effort.

The proposed demolition activities would not require the large assemblages of equipment typically used in large-scale construction. Furthermore, local topography of the terrain, coupled with the dense vegetation would further reduce noise from this value. However, as a worst-case scenario, the 89-dBA value is used to assess the impact of the construction effort.

The project is located within a national recreation area and onsite construction noise is not subject to local regulation by either the City of Malibu or County of Los Angeles. Additionally, there are no sensitive land uses located within the project area. Still, because noise is not stopped by municipal boundaries, the local City and County standards are used as the basis for impact.

The City of Malibu does not set noise limitations for construction activities. The City does however, set days and hours during which construction may occur. The City allows unimpeded construction between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday and 8:00 a.m. and 5:00 p.m. on Saturdays. No construction is allowed on Sundays or holidays. Similarly, the County of Los Angeles limits construction that may create a disturbance across any residential or commercial property line to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. No construction is permitted on Sundays or holidays.

The RCD proposes that construction be performed Monday through Friday between the hours of 7:00 a.m. and 5:00 p.m. No work is to occur on weekends. These hours are within those allowed for construction by both the City of Malibu and County of Los Angeles and any impacts would be less than significant.

Additionally, based on a composite noise level of 89 dBA Leq as measured at a distance of 50 feet, the 75 dBA noise level associated with construction proximate to sensitive Los Angeles County receptors would occur at a distance of 250 feet from the equipment. No sensitive County of Los Angeles land uses are located within this distance from any of the demolition sites and again, any impact is less than significant.

Finally, while impacts on sensitive species are not regulated by the City of Malibu or County of Los Angeles, the RCD is perceptive to the birds that inhabit the area. Construction is to be performed during the months of September and October out of the nesting and breeding season.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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?	☐	☐	☐	☑

At over 17 miles to the east, the Santa Monica Airport represents the most proximate airport. The project site is not located within an airport land use plan area or in the immediate vicinity of any public airports.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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?	☐	☐	☐	☑

The project site is not located within the immediate vicinity of any private airstrip.

XII. POPULATION AND HOUSING

The park is federal land owned by the National Park Service. The only housing onsite is a ranger facility and a park-owned intern dormitory.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project 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)?	☐	☐	☐	☑

There are no proposed new homes and or businesses as part of this project. No impacts would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

No existing housing would be affected or require removal/relocation. No impacts would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

The proposed project would not displace substantial numbers of people. No impacts would occur.

XIII. PUBLIC SERVICES

No public services are located in the vicinity of the dams or Arizona crossings. A utility line services the Keller house at Arizona Crossing 1.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	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?	☐	☐	☑	☐

Removal of the check Dams and Arizona crossings will only involve a short duration of construction. No utilities or services will be affected. The utility line at the Arizona Crossing 1 to the Keller house will either remain intact or be slightly modified with installation of the new bridge.

XIV. RECREATION

The Santa Monica Mountains Conservancy opened Solstice Canyon as a public park in 1988. The National Park Service acquired the park in 1997. Each year more than 33 million visitors enjoy the greater recreation area composed of the beaches and the mountains. In 2003, there were 36,375 vehicles that accessed the park, equating to approximately 90,940 patrons (assuming 2.5 persons per car). In addition, people walk in from outside the park, having parked at the beach or other areas. Thus, approximately 7,500 people may access the park in a one-month period.

The park is highlighted by more than 20 miles of trails from the parking lot in Solstice Canyon. Other activity locations include a small picnic area between the parking lot and Solstice Creek east of the visitor station. Restroom facilities are available at the parking lot. Overnight camping is not permitted in the project area. Hours of operation are generally from 8:00 a.m. to sunset. However, this applies only to parking, and park users are sometimes found in the park between sunset and 8:00 a.m. Bicycles are limited to the paved road that runs through the middle of the park, and also serves as a service road. The project components are all located near this roadway which generally follows the creek.

a)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☑

The construction associated with the project is temporary. No increase of visitor facilities is proposed, and no impacts will occur.

b)	Does the project include recreational facilities or require the construction or expansion or recreational facilities which might have an adverse physical effect on the environment?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporation ☑	Less than Significant Impact ☐	No Impact ☐

No increase in recreational facilities is proposed. No increase in or expansion of recreational facilities will occur.

At some point during construction, all trails will likely be closed for about two weeks or even up to a month. During removal of Arizona crossings 2 and/or 3, only a portion of access may have to be closed. The trail splits at Arizona crossing 2 and two trails are available from Arizona crossings 2 to 3. The north trail (formal trail) would remain open and the informal south trail would be closed. Access could be maintained but would have to be managed with signs to direct hikers to the upper trail during the construction period. With placement of signs as mitigation to direct hikers away from construction areas and inform them of alternate trails, temporary construction impacts would be less than significant.

Permanent removal of the Arizona crossings would result in the elimination of hazardous drop-offs adjacent to wet stream crossings. With two trails at Arizona Crossing 2, if the informal south trail were removed, there would be no impact as long as the formal main trail would remain. With the removal of Arizona Crossing 3, a slick wet cement crossing with a drop-off would become a wet cobble crossing at stream grade. This wet cobble crossing may represent an inconvenience. The impacts of removal of Arizona Crossing 3 would be less than significant after mitigation. The removal of Arizona crossings should improve safety at trail stream crossings. Arizona Crossing 4 is not used by the public.

Mitigation Measures

During construction, the construction staging area should be separated from the public by temporary fencing and warning signs. To the extent feasible, each separate construction area should be, at a minimum, cordoned off by tape or some type of temporary barrier if fencing is not feasible. Signs shall be placed warning of possible dangers at all construction locations. Signs shall explicitly warn of dangers in both English and Spanish. Consideration of placement of cameras in select locations may be warranted as the park has a past history of vandalism at construction sites.

Mitigation for the trail closures during construction shall include explicit signage in English and Spanish. If necessary, construction personnel may be required to be present at specific locations to assure that trail users do not cross into unauthorized areas that may pose a danger.

Mitigation for the loss of the Arizona Crossing 3 shall include signage that shows optional paths for other creek crossings

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Does the project include potential safety impacts to recreational users?	☐	☑	☐	☐

During construction, the park may be partially closed, resulting in minor temporary restrictions to recreational use. Even though the park may be partially closed during construction, any closure would be limited to vehicles only. Because the park is not fenced, the public tends to ignore signage and enter and use the park. The park's past experience with construction projects has found children climbing on construction equipment and patrons walking through construction areas during non-construction hours, even though signs warning of the dangers were posted. This activities have the potential to result in public safety impacts. These potentially significant impacts can be mitigated to less than significant by fencing and signs.

Mitigation Measures

Mitigation shall include that the construction staging area be separated from the public by temporary fencing and warning signs. To the extent feasible, each separate construction area should be, at a minimum, cordoned off by tape or some type of temporary barrier if fencing is not feasible. Signs shall be placed warning of possible dangers at all construction locations. Signs shall explicitly warn of dangers in both English and Spanish. Consideration of placement of cameras in select locations may be warranted as the Park has a past history of vandalism at construction sites.

XV. TRANSPORTATION/TRAFFIC

A paved road runs through the middle of the park, following along the creek. Bicyclists also use this roadway. Carpooling is encouraged, as parking is limited. In 2003, there were 36,375 vehicles which accessed the park. Additional people park at the beach outside of the park and walk in, thus actual visitation numbers are higher (J. Brag, NPS, Public Affairs Officer). Parking lot space is limited, and during heavy use periods, visitors often park on the roadway shoulders inside and outside of the park, or at the beach.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☑	☐

The project would result in a temporary increase in construction-related traffic and construction workers. Because of the individual project actions are small, the construction equipment is expected to be limited to no more than two to three pieces of equipment working in one area. Since there will be no permanent increase in traffic, the impacts are considered less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☑

Because there will not be a permanent increase in traffic, there will be no cumulative addition to the roadways in the area, and no impacts to established congestion management plans.

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Would the project 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?	☐	☐	☐	☑

The project does not involve air traffic, thus there will be no impacts.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
d)	Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑

The project does not propose to redesign roadways. There will be no hazards impacts.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
e)	Would the project result in inadequate emergency access?	☐	☑	☐	☐

The project only involves temporary construction equipment and worker vehicles to be active in the area only for the period of construction. Construction equipment will be working off of the roadways and no impacts to emergency access should occur. If the public is allowed to bring vehicles into the park during construction, public parking may result in areas of congestion and patrons parking in a manner that could block emergency access.

Mitigation Measures

Signs shall be clearly placed at the park entrance of the work effort and reduced parking/accessibility. Signs shall also be placed inside the park warning of construction areas and redirecting parking as required.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
f)	Would the project result in inadequate parking capacity?	☐	☑	☐	☐

No permanent changes to parking capacity would occur as a result of the proposed modifications. Construction equipment working in an area may preclude visitor parking during construction. As the park would remain open during construction, parking may be constrained and a temporary impact may occur.

Mitigation Measures

Mitigation for (e) above applies.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
g)	Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☑

The project is of a temporary nature and will not affect existing plans, policies or programs. No impacts will occur.

XVI. UTILITIES AND SERVICE SYSTEMS

The only utilities in the park service the restroom, and the Keller House and intern dormitory.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☑

The project entails only minor construction. No exceedance of wastewater treatment requirements would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Would the project 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?	☐	☐	☐	☑

The project entails only minor construction. No need for new water or wastewater treatment or expansion of existing facilities would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑

The project entails only minor construction. No need for new stormwater drainage facilities would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
d)	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☑

The project entails only minor construction. No need for new or expansion of existing water supplies facilities would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
e)	Would the project 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?	☐	☐	☐	☑

The project entails only minor construction. No need for new or expansion of existing wastewater treatment facilities would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
f)	Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☑	☐

The project entails only minor construction. Debris will be disposal to a local landfill. However, quantities are small, as such impacts would be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
g)	Would the project comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☑

The project entails only minor construction. No need for new or expansion of existing solid waste facilities would occur.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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?	☐	☑	☐	☐

The project entails the complete removal of check dams and removal of the Arizona crossings for the purpose of removing these manmade barriers to steelhead trout and thus, providing a beneficial impact to that species. Deconstruction of these barriers would not degrade the quality of the environment nor have permanent effects on fish or wildlife species, nor would the project reduce the range of rare or endangered plants or animals.

Within the Area of Potential Effect there are two small archaeological sites near the road that were discovered during monitoring for an earlier rehabilitation project. They would not be affected by the dam and crossing removal actions. It is possible that displaced archaeological artifacts may be trapped in the sediments behind the dams but these artifacts would lack provenance. In spite of extensive archaeological surveying, there are no known archaeological sites at the locations of ground disturbance. However, it is possible that intact archaeological deposits may be encountered in the stream banks that will be exposed as a result of removing dams or crossings. No historic resources would be impacted. Because of this potential, professional archaeologists will monitor all ground disturbances. Procedures to be followed in the event of inadvertent discoveries are defined in a Memorandum of Agreement between NPS and the California State Historic Preservation Office that is in place from the previous rehabilitation project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
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)?	☐	☐	☐	☑

The project is one of many in the region that are in process of restoring steelhead passage (i.e., Malibu Creek, Topanga Creek, etc.). As such, the project contributes in a beneficial way to the overall cumulative environment of the steelhead trout.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☑	☐

The removal of the check dams and Arizona crossings will have a less than significant impact on human beings. For example, direct impacts include that the project will slightly alter the visual environment, and have a minimal impact on recreation from the removal of a few creek crossings (Arizona crossings). No indirect impacts will occur. However, the overall effect on the human experience will be less than significant.

Sources

Arnold, J.E.
1987 *Craft Specialization in the Prehistoric Channel Islands, California*. University of California Publications in Anthropology 18. University of California Press, Berkeley and Los Angeles.

Aviña, Rose H.
1976 *Spanish and Mexican Land Grants in California*. Arno Press, New York.

California Air Resources Board
1999 - 2003, Air Pollution Data Monitoring Data (July 7, 2004).

California Air Resources Board
URBEMIS2002 Computer Model, Version 7.4.2.

Caltrans
Technical Noise Supplement, October 1998.

Castillo, Edward D.
1978 The Impact of Euro-American Exploration and Settlement. In *Handbook of North American Indians: California, Volume 8,* edited by R.F. Heizer, pp. 99-127. Smithsonian Institution, Washington, D.C.

City of Malibu
Ge*neral Plan Noise Element*, November 1995.

City of Malibu
Municipal Code, May 2004.

Coast Air Basin, Prepared by Ralph W. Keith
1993 South Coast Air Quality Monitoring District, CEQA Air Quality Handbook, April 1993.

County of Los Angeles
County of Los Angeles General Plan Noise Element, January 30, 1975.

County of Los Angeles Municipal Code, 1978.

Grant, C.
1978a Chumash: Introduction. In *Handbook of North American Indians: California, Volume 8,* edited by R.F. Heizer, pp. 505-508. Smithsonian Institution, Washington, D.C.

1978b Eastern Coastal Chumash. In *Handbook of North American Indians: California, Volume 8,* edited by R.F. Heizer, pp. 509-519. Smithsonian Institution, Washington, D.C.

Holmes, Phil
2004 Solstice Canyon History. Draft report on file at the Santa Monica Mountains National Recreation Area.

Klein, R., B. Ketcham, B.Jackson, and C. Moore
2002 Solstice Creek Field Review: Results and Recommendations Santa Monica Mountains National Recreation Area. March 6, 2002,

NPS (National Park Service)
2001 Draft Environmental Assessment Rehabilitate Facilities and Replace Low Water Crossing of Solstice Creek in Solstice Canyon. April 2001.

Roche, J. and A. Kearns
2002 Solstice Creek: Stored Sediment Volume and Size Distribution Behind Barriers to Flow. September 23 to 27, 2002.

RWQCB (Regional Water Quality Control Board Los Angeles Region)
1994 Water Quality Control Plan for the Los Angeles Region.

South Coast Air Quality Monitoring District
1980 A Climatological/Air Quality Profile, California South.

South Coast Air Quality Monitoring District
1993 Rules and Regulations, January 1993.

Final 2003 AQMP, August 1 2003.

Spina, A.P. and K.A. Johnson
1999 Habitat Characteristics of solstice Creek: Implications for Steelhead. National Marine Fisheries Service. September 28, 1999.

U.S. Department of Housing and Urban Development
The Noise Guidebook, March 1985 U.S.

U.S. Environmental Protection Agency
Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, Bolt, Beranek, and Newman, 1971.

U.S. Department of the Interior, National Park Service; *Santa Monica Mountains National Recreation Area, Draft Environmental Assessment. Rehabilitate Facilities and Replace Low Water Crossing of Solstice Creek in Solstice Canyon.* April 2001.

Personal Contacts:

Jean Bray, National Park Service, Public Affairs Office, July 2004.

Leslie Jehings, Park Landscape Architect, Santa Monica Mountains National Recreation Area, July 2004.

APPENDIX A

SPECIES OCCURRING AT THE FOUR DAM AND FOUR ARIZONA CROSSING LOCATIONS

Appendix A
Species Occurring at the Dam and Arizona Crossing Locations

Solstice Canyon Creek Vegetation survey for Dam and Arizona Crossing removal
30 July – 02 Aug 2004

DAM SITE 0; E338652 N3767513 El. 19 m
Alnus rhombifolia dominant overstory with understory characterized by *Salix lasiolepis, Rubus ursinus,* and *Hoita machrostachya.*
Other trees: *Juglans californica, Platanus racemosa, Quercus agrifolia,* and *Umbellularia californica.*
Herbacious species: *Euphorbia peplus*, Euphorbia terracina*, Lathyrus vestitus, Marrubium vulgare*, Plantago major*, Rorippa nasturtium-aquatica,, Sonchus oleraceus*, Stellaria media*.*
Grasses, Sedges and Rushes: *Cyperus involucratus*, Ehrharta erecta*, Juncus xiphioides, Leymus condensatus.*

DAM SITE 1; E 338606 N 3767518 EL. 31 m
Alnus rhombifolia dominant overstory with *Rubus ursinus – Artemisia douglasiana* dominated understory.
Other trees: *Juglans californica, Platanus racemosa, Salix lasiolepis, Umbellularia californica.*
Other shrubs: *Clematis ligusticifolia.*
Herbacious species: *Adiantum capillus-veneris, Artemisia douglasiana, Epilobium ciliatum, Equisetum telmateia* ssp. *braunii, Euphorbia terracina*.*
Grasses, Sedges and Rushes: *Cyperus involucratus*, Ehrharta erecta*, Juncus xiphioides, Leymus condensatus.*

DAM SITE 2; no signal for gps
Alnus rhombifolia dominated overstory with and understory dominated by *Rubus ursinus* and *Toxicodendron diversilobum.*
Other trees: *Platanus racemosa, Salix lasiolepis.*
Other shrubs: *Hoita machrostachya.*
Herbacious species: *Euphorbia peplus*, Euphorbia terracina*, Plantago major*, Sonchus oleraceus*, Rorippa nasturtium-aquaticum, Rumex conglomeratus*.*
Grasses, Sedges and Rushes: *Cyperus involucratus*, Ehrharta erecta*, Juncus xiphioides, Piptatherum miliaceum*.*

DAM SITE 3; no signal for gps
Alnus rhombifolia dominated overstory with understory of a mix of shrubs and herbs.
Other trees: *Juglans californica, Platanus racemosa.*
Other shrubs: *Baccharis plummerae* ssp. *plummerae, Malosma laurina, Rubus ursinus.*
Herbacious species: *Artemisia douglasiana, Brickellia californica, Euthamia occidentalis, Foeniculum vulgare*, Hazardia squarrosa.*
Grasses, Sedges and Rushes: *Cyperus involucratus*, Ehrharta erecta*, Koeleria phleioides*, Piptatherum miliaceum*.*

DAM SITE 4; E338257 N3768272
Alnus rhombifolia overstory with an understory of a mix of shrubs and herbs.
Other trees: *Sequoia sempervirens.*
Shrubs & woody vines: *Baccharis plummerae* ssp. *plummerae, Hoita machrostachya, Rubus ursinus, Toxicodendron diversilobum.*
Herbacious: *Adiantum capillus-veneris, Mimulus cardinalis, Vinca major*.*
Grasses, sedges & rushes: *Piptatherum miliaceum*.*

AZ Xing 1 (@ Keller House); no signal for gps
Alnus rhombifolia – Platanus racemosa overstory with an understory of various herbs and grasses, and abundant moss cover on the dam drop off.
Herbacious species: *Adiantum capillus-veneris, Artemisia douglasiana, Mimulus cardinalis, Plantago major*, Tropaeolum majus*.*
Grasses, sedges & rushes: *Bromus diandrus*, Cyperus involucratus*, Koeleria phleoides*, Leymus condensatus, Piptatherum miliaceum*.*

AZ Xing 2; (E338257 N3768242 El. 55 m)
Alnus rhombifolia - Quercus agrifolia - Platanus racemosa - Umbellularia californica overstory with an understory of *Rubus ursinus* and *Toxicodendron diversilobum.*
Herbacious species: *Lilium humbodtii ssp. ocellatum, Pteridium aquilinum, Vinca major*.*
Grasses, sedges & rushes: *Ehrharta erecta*, Piptatherum miliaceum*.*

AZ Xing 3; E338230 N3768397
Alnus rhombifolia - *Quercus agrifolia - Umbellularia californica* overstory with an understory of *Toxicodendron diversilobum, Rubus ursinus* and a mix of herbs and grasses.
Other trees: *Juglans californica, Platanus racemosa.*
Other shrubs: *Baccharis plummerae* ssp. *plummerae, Heteromeles arbutifolia, Venegasia carpesioides.*
Herbacious species: *Adiantum capillus-veneris, Bidens pilosa* ssp. *pilosa*, Brickellia californica, Datisca glomerata, Epilobium ciliatum, Euphorbia terracina*, Euthamia occidentalis, Hirschfeldia incana*, Mimulus cardinalis, Plantago major*, Rumex conglomeratus*, Solanum douglasii, Taraxacum officinales*, Vinca major*,* Unknown 1.
Grasses, sedges & rushes: *Bromus carinatus, Bromus diandrus*, Cyperus involucratus*, Ehrharta erecta*, Juncus* sp., *Koeleria phleoides*, Melica imperfecta, Piptatherum miliaceum*.*

AZ Xing 4; E338180 N3768694
Quercus agrifolia – Umbellularia californica overstory with an understory of various shrubs and herbs.
Other trees: *Juglans californica , Platanus racemosa.*
Shrubs: *Hoita machrostachya, Keckiella cordifolia, Mimulus aurantiacus, Rhus ovata, Rubus ursinus, Toxicodendron diversilobum.*
Herbacious species: *Adiantum capillus-veneris, Mimulus cardinalis.*
Grasses, sedges & rushes: *Cyperus involucratus*.*

RESPONSE TO COMMENTS ON INITIAL STUDY MITIGATED NEGATIVE DECLARATION FOR SOLSTICE CREEK STEELHEAD RESTORATION PROJECT

Prepared for:

RESOURCE CONSERVATION DISTRICT
OF THE SANTA MONICA MOUNTAINS
122 N. Topanga Canyon Blvd.
Topanga, California 90290

Prepared by:

CHAMBERS GROUP, INC.
17671 Cowan Avenue, Suite 100
Irvine, California 92614
(949) 261-5414

March 2005

Chambers Group®

TABLE OF CONTENTS

Page

SECTION 1.0 – INTRODUCTION **1**

LETTER FROM STATE OF CALIFORNIA
GOVERNOR'S OFFICE OF PLANNING AND RESEARCH 2

LETTER FROM STATE OF CALIFORNIA
DEPARTMENT OF PARKS AND RECREATION 4

RESPONSE TO COMMENTS FROM STATE OF CALIFORNIA
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION 6

LETTER FROM STATE OF CALIFORNIA
CALIFORNIA DEPARTMENT OF FISH AND GAME 7

RESPONSE TO COMMENTS FROM
CALIFORNIA DEPARTMENT OF FISH AND GAME 10

SECTION 1.0 – INTRODUCTION

In November 2004, The Resource Conservation District of the Santa Monica Mountains completed an Initial Study/Mitigated Negative Declaration for the Solstice Creek Steelhead Restoration Project. The Initial Study/Mitigated Negative Declaration was received by the State Clearing House on February 7, 2005, and sent out for public review between February 7 and February 28, 2005. Comments were received from the following organizations:

- California Department of Parks and Restoration
- California Department of Fish and Game

Each comment later is presented followed by the response to comments.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Sean Walsh
Director

March 1, 2005

Steve Williams
Resource Conservation District of the Santa Monica Mountains
Resource Conservation District
122 N. Topanga Canyon Blvd.
Topanga, CA 90290

Subject: Solstice Creek Steelhead Restoration Project
SCH#: 2005021029

Dear Steve Williams:

The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on February 28, 2005, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2005021029
Project Title Solstice Creek Steelhead Restoration Project
Lead Agency Resource Conservation District of the Santa Monica Mountains

Type Neg Negative Declaration

Description The National Park Service (NPS) and the Resource Conservation District of the Santa Monica Mountains plan to restore steelhead habitat in Solstice Creek by removing the upstream barriers to fish passage. The proposed project plans to remove the three check dams and four Arizona crossings upstream of the NPS parking area.

Lead Agency Contact

Name Steve Williams
Agency Santa Monica Mountains Conservancy
Phone 310-455.1030 ext. 212 **Fax**
email
Address Resource Conservation District
122 N. Topanga Canyon Blvd.
City Topanga **State** CA **Zip** 90290

Project Location

County Los Angeles
City Malibu
Region
Cross Streets Pacific Coast Highway and Corral Road
Parcel No. N/A - NPS Federal
Township 1S **Range** 18W **Section** To/Mal **Base** SBB&M

Proximity to:

Highways 1
Airports
Railways
Waterways Solstice Creek, Latigo Creek
Schools Pepperdine University
Land Use Open Space

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Noise; Recreation/Parks; Soil Erosion/Compaction/Grading; Vegetation; Water Quality; Wetland/Riparian; Wildlife

Reviewing Agencies Resources Agency; Department of Boating and Waterways; California Coastal Commission; Department of Fish and Game, Region 5; Department of Fish and Game, Marine Region; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Caltrans, District 7; Native American Heritage Commission; State Lands Commission

Date Received 02/07/2005 **Start of Review** 02/07/2005 **End of Review** 02/28/2005

Note: Blanks in data fields result from insufficient information provided by lead agency.

State of California • The Resources Agency
Arnold Schwarzenegger, Governor
DEPARTMENT OF PARKS AND RECREATION
Ruth Coleman, Director
Angeles District
1925 Las Virgenes Rd.
Calabasas, CA 91302

February 25, 2005

RECEIVED
FEB 2 5 2005
STATE CLEARING HOUSE

clear 2-28-05 e

Steve Williams
RCDSSM
122 N. Topanga Canyon Blvd.
Topanga, CA 90290

RE: Comments on the Solstice Creek Steelhead Restoration Project, Negative Declaration, SCH #2005021029

Dear Mr. Williams:

The California Department of Parks and Recreation, Angeles District, has the following comments in response to the initial study checklist form for the Solstice Creek Steelhead Restoration Project.

In **Section VII, Hazards and Hazardous Materials,** the document states in response to question b that, "*[t]he project would only use diesel fuels for construction equipment. No other hazardous materials would be associated with construction.*" There is no mention of the other hazardous materials that are necessary for the proper operation of the types of equipment specified. Any one of these hazardous materials could be released from equipment in the event of an accident. In particular, the inadvertent release of hydraulic fluids, greases, and other lubricants should be addressed. The document also states that, "*[d]iesel fuel may spill into the waterway. The impact and mitigation is discussed under Hydrology/Water Quality section.*" We can find no discussion of the impact or mitigation of accidental diesel fuel spill under the Hydrology/Water Quality section as the document indicates. Any potential threats and mitigation measures associated with hazardous materials should be addressed in the section entitled **Hazards and Hazardous Materials.**

In **Section VIII, Hydrology and Water Quality,** the document states in response to question h that, "*[t]he proposed project would not involve the construction of any structures.*" However, the project description states that a bridge will be constructed at the site of the Keller Arizona crossing after it is removed. Furthermore, the project description mentions two possible alignments for this bridge and calls for the placement of boulders to buttress the bridge abutment and wing wall. We believe that the placement of this structure and associated armoring will influence stream flows during flooding events. The nature of this influence should be discussed for each of the considered bridge alignments.

The document makes no distinction as to what extent each of the structures to be removed would block steelhead passage if the fish were able to cross the two lowest barriers that are noted in the report but are located outside of the project area. We believe that at least some of the structures within the project area would be passable to migrating steelhead during ideal flows. This should have been disclosed in the environmental assessment document prepared by the Chambers Group for Moffatt & Nichol, and an alternative in which only the most severe barriers are removed should have been considered in the analysis. Other preliminary studies of fish migration barriers conducted in the region attempt to quantify to what extent individual barriers are likely to impede fish migrations during specified flows. We feel that a consistent approach towards characterizing fish passage barriers should be implemented in the Santa Monica Mountains National Recreation Area given the multiple number of landholding public agencies that are likely to attempt similar projects in the future.

Sincerely,

Nathaniel Cox
Assistant Resource Ecologist

Response to Comments from the California Department of Parks and Recreation

Comment: on Section VII, Hazards and Hazardous Materials

Response: In addition to diesel fuels, construction equipment also will use small amounts of other hazardous materials including hydraulic fluids, grease, and other lubricants. Because creek water will be diverted around the construction sites, there is little potential for these materials to be spilled or leaked into the stream. In addition, Best Management Practices will be followed including conducting all fueling and other servicing of construction equipment in areas where there is no potential for fuel or other contaminants to enter the streambed.

Comment: on Section VII, Hydrology and Water Quality

Response: There is only one bridge alignment. The alignment and design of the bridge have been made to cause no effect to the 100 year flood. The bridge will have sufficient freeboard that the 100-year flow will pass underneath it. Construction of the bridge will involve no bank armoring or placement of structures in the streambed. The Keller crossing bridge is designed to completely span the creek with two feet of freeboard over the 100-year flood per government requirements. The abutments are designed to lie along the alignment of the channel banks and be recessed into the bank slope. As such, it should not impede the flood or cause any adverse effects to stream hydrology.

Comment: Requests information on the extent to which the existing structures block steelhead passage.

Response: It is true that migrating adult steelhead may be able to pass certain structures during ideal flows. However, it is the NPS and RCD's intention to provide fish passage for both adult and juvenile steelhead trout. Currently, all barriers are impassable to juvenile steelhead trout under all flow conditions. Juvenile steelhead trout migrate up and downstream as they feed or relocate to more ideal pools throughout the year.

State of California – The Resources Agency ARNOLD SCHWARZENEGGER, *Governor*

DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201

February 28, 2005

BY FACSIMILE AND U.S. MAIL

Mr. Steve Williams
Resource Conservation District of the
Santa Monica Mountains
122 North Topanga Canyon Blvd.
Topanga, CA 90290
Fax No.: (310) 455-1172

Draft Mitigated Negative Declaration for
Solstice Creek Steelhead Restoration Project
SCH # 2005021029, Los Angeles County

Dear Mr. Williams:

The Department of Fish and Game (Department) appreciates this opportunity to comment on the Draft Negative Declaration (DND) and Initial Study (IS) for the above-referenced proposed project relative to impacts to biological resources. The project proposes to restore southern steelhead habitat in upper Solstice Creek by removing three check dams and four Arizona Crossings within the creek located within the Santa Monica Mountains National Recreation Area upstream of the National Park Service Parking Lot. The proposed project is located near the intersection of Pacific Coast Highway and Corral Canyon Road near the City of Malibu.

Department Fishery Restoration Grants Program staff have previously provided support and input to the Lead Agency regarding project design and implementation. The following additional statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the project (CEQA Section 15386) and pursuant to our authority as a Responsible Agency under the California Environmental Quality Act (CEQA) CEQA Section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (Fish and Game Code Section 2050 et seq) and Fish and Game Code Section 1600 et seq.:

Impacts to Sensitive Biological Resources

1. Herptofauna - The IS states that a small amount of breeding habitat for coast range newt, a California Species of Special Concern, and tree frogs would be disturbed during the process of removing the check dams and road crossings due to breeding pools being temporarily filled from accumulated sediment behind the removed barriers. Southwestern pond turtles (SPT) were not observed in the proposed project area during recent surveys but that SPT may have inhabited Solstice Creek. The IS also states that there is a moderate potential for coast horned lizard and San-Diego mountain kingsnake to occupy the project site and a low potential for California red-legged frog and two stripped garter snake to inhabit the site

a. The Department recommends that amphibian egg masses, larva and adults be salvaged from potentially impacted pools and placed into appropriate adjacent habitat within Solstice Creek which will not be impacted by sedimentation and other project related disturbances.

b. The Department recommends live trapping for SPT within suitable habitat immediately prior to and during project activities within locations expected to be adversely impacted by the proposed project. Captured turtles should be relocated into suitable adjacent habitat within Solstice Creek away from project disturbances.

c. Pre-project clearance surveys should be conducted for all other reptile and amphibian species with species being removed out of harms way into adjacent suitable habitat as determined by a biological monitor.

d. Trapping reptiles and amphibians must be conducted by individuals holding appropriate permits and MOU's from the Department to conduct such activities.

e. A California Endangered Species Act (CESA) Permit must be obtained, if the project has the potential to result in "take" of species of plants or animals listed under CESA, either during construction or over the life of the project.

2. Breeding Birds – The IS states that the project sites support habitat suitable for the State- and federally-endangered least Bell's vireo (LBV).

a. If the project will be conducted during the breeding season for LBV, April 1-September 1, the Department recommends focused surveys be conducted to determine presence/absence and to implement avoidance measures to avoid take and to further consult with the Department in compliance with the California Endangered Species Act.

b. Proposed project activities (including disturbances to vegetation) should take place outside of the breeding bird season, March 1-September 15, (February 1-September 15 for raptors) and to avoid take (including disturbances which would cause abandonment of active nests containing eggs and/or young). If project activities cannot avoid the breeding bird season, nest surveys should be conducted and active nests should be avoided and provided with a minimum buffer as determined by a biological monitor (the Department recommends a minimum 500-foot buffer for all active raptor nests).

3. Riparian Resources – The IS states that the project will result in less than 0.1 acre of temporary disturbance to riparian vegetation under the jurisdiction of the Department and that the project will result in temporary sedimentation/filling of down stream pools.

a. The Department requires a Streambed Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant prior to any direct or indirect impact to a lake or stream bed, bank or channel or associated riparian resources. The Department's issuance of a SAA may be a project that is subject to CEQA. To facilitate

our issuance of the Agreement when CEQA applies, the Department as a responsible agency under CEQA may consider the local jurisdiction's (lead agency) document for the project. To minimize additional requirements by the Department under CEQA the document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the Agreement. Early consultation is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources.

Thank you for this opportunity to provide comment. Questions regarding this letter and further coordination on these issues should be directed to Mr. Scott Harris, Associate Wildlife Biologist, at (626) 797-3170.

Sincerely,

C. F. Raysbrook
Regional Manager

cc: Ms. Morgan Wehtje
Mr. Scott Harris
Ms. Mary Larson
Mr. John O'Brien
CFR-Chron; HCP-Chron
Department of Fish and Game

Mr. Scott Morgan
State Clearinghouse

SPH:sph
spharis\Solstice CreekSteelhead_02-05.doc

Response to Comments from California Department of Fish and Game

Comment: Herptofauna

Response: Any amphibian egg masses, larvae or adults that may be impacted would be relocated. However, the proposed work is planned to take place after the amphibian breeding season between April and August.

The National Park Service conducts annual amphibian surveys in Solstice Creek. Historical reports and five years of intensive stream sampling have never identified southwestern pond turtles in this watershed. There should be no impacts on this species.

Comment: Breeding Birds

Response: The proposed activity will not take place during the breeding season for sensitive bird species. In addition, an active bird survey (Monitoring Avian Productivity and Survivorship) occurs every year in Solstice Canyon. Ten mist nets within the area of the dams are set up. Upon request we can provide the results of this effort. To our knowledge there have been no sensitive bird species identified in Solstice Canyon. In the event that a sensitive species are discovered, appropriate measures will be taken to ensure that individual(s) are not disturbed by construction activity. If necessary, these measures may include the postponement of construction.

Comment: Riparian Resources

Response: The NPS and RCD are in the process of applying for a Streambed Alteration Agreement from the California Department of Fish and Game.