

Notice of Determination

To: Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: Cachuma Operation and Maintenance Board
3301 Laurel Canyon Road
Santa Barbara, CA 93105

 x Clerk of the Board
County of Santa Barbara
105 East Anapamu Street, Room 407
Santa Barbara, CA 93101

Subject:

Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Project Title: Quiota Creek, Fish Passage Enhancement Projects

<u>#2003071160</u>	<u>Timothy H. Robinson</u>	<u>805-687-4011</u>
State Clearinghouse Number	Lead Agency Contact Person	Area Code/Telephone/Extension

COUNTY OF SANTA BARBARA
CLERK OF THE BOARD OF SUPERVISORS
JUL 22 2008

Project Location: 2-3 miles (9 low flow crossings) south of the City of Santa Ynez on Refugio Road where Refugio Road crosses Quiota Creek.

Project Description:

In 2004, the Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the Lower Santa Ynez River Fish Management Plan and Cachuma Project Biological Opinion for southern steelhead trout was recorded. The EIR/EIS was prepared by the Cachuma Operation and Maintenance Board and United States Bureau of Reclamation, Department of the Interior. An Addendum was prepared to add a third alternative fish passage barrier fix for the nine low flow road crossings on Quiota Creek, a tributary to the Santa Ynez River near the town of Santa Ynez. The new alternative is for a bottomless-arched culvert which has the same or less environmental impact as the two approved alternatives (bridge or rock riffle fishway) in the EIR/EIS. Pursuant to CEQA guidelines and since no greater environmental impact will be associated with this alternative; no public review was necessary.

This is to advise that the Cachuma Operation and Maintenance Board has approved the above described project

Lead Agency Responsible Agency

on June 23, 2008 and has made the following determination regarding the above described project:
(Date)

1. The project [will will not] have a significant effect on the environment beyond those described in the Environmental Impact Report previously prepared.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
 A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [were were not] made a condition of the approval of the project.
4. A mitigation report or monitoring plan [was was not] adopted for this project.
5. A statement of Overriding Considerations [was was not] adopted for this project.
6. Findings [were were not] made pursuant to the provisions of CEQA.

This is to certify that the Addendum to the Cachuma Project EIR/EIS (2004) and record of project approval is available to the General Public at:

<u>Cachuma Operation and Maintenance Board</u>	<u>3301 Laurel Canyon Road</u>	<u>Santa Barbara, CA 93105</u>
<u>Signature (Public Agency)</u>	<u>June 23, 2008</u>	<u>Senior Resource Scientist</u>
	<i>Date</i>	<i>Title</i>

Date received for filing at OPR: 7/25/08 (NOD regarding the Addendum)

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1.0 INTRODUCTION

This document has been prepared pursuant to the California Environmental Quality Act (CEQA), Public Resources Code §21000 and constitutes an Addendum to the previously approved February 2004 Final Environmental Impact Report / Environmental Impact Statement for the Lower Santa Ynez River Fish Management Plan and Cachuma Project Biological Opinion for Southern Steelhead Trout (COMB and USBR, 2004), hereto referred to as the EIR/EIS. There are two alternative described in the EIR/EIS for fixing steelhead/rainbow trout passage impediments along Quiota Creek. This Addendum proposes a third alternative design for inclusion in the list for potential designs for fixing steelhead/rainbow trout passage along Quiota Creek. There are nine low-flow crossings on Quiota Creek that are fish passage impediments and have been described in the EIR/EIS, eight of which are included in the programmatic EIR/EIS (Crossings 2-9). The current designs within the EIR/EIS for passage impediment removal are 1) a rock riffle fishway and 2) a free span bridge. The desired third alternative would be a **bottomless-arched culvert** with similar fish passage and flow conveyance potential. This alternative design does not significantly change the project footprint at each crossing as determined for a rock riffle fishway or free span bridge hence does not alter any conditions identified in CEQA Guidelines §15162. Pursuant to CEQA Guidelines §15164(c), an Addendum can be prepared and does not need to be circulated for public review.

The February 2004 EIR/EIS was prepared to assess potential adverse environmental impacts associated with the implementation of the Biological Opinion for the Cachuma Project (BO) and Lower Santa Ynez River Fish Management Plan (FMP). The BO was prepared by the National Marine Fisheries Service (NMFS) regarding the effect of the Cachuma Project operations on steelhead in the Lower Santa Ynez River (NMFS, 2000). The FMP was prepared by Santa Ynez River Technical Advisory Committee which included Reclamation and other agencies and parties involved in the Cachuma Project (SYRTAC, 2000).

The EIR/EIS fulfilled the requirements of the CEQA/NEPA for the FMP and BO, which included proposed fish passage activities on Quiota Creek specifically for the identified eight low-flow crossings on the creek. Quiota Creek contains suitable habitat for steelhead/rainbow trout and is included as designated critical habitat for southern steelhead (*Oncorhynchus mykiss irideus*) (NOAA, 2005). The FMP/BO proposed various management actions and projects to improve habitat conditions for the endangered southern steelhead and other aquatic species on the Santa Ynez River below Bradbury Dam and Lake Cachuma in Santa Barbara County, which included improvements on Quiota Creek. Hence, federal, state, and local resource agencies have recognized the significance and importance of making assessable the middle and upper reaches of Quiota Creek for spawning and rearing southern steelhead (CCRB, 2007).

According to the FMP and reflected in the EIR/EIS, habitat enhancement activities on Quiota Creek represent one of the best opportunities for successful steelhead/rainbow trout restoration on the Lower Santa Ynez River. The nine low-flow crossings are passage barriers of varying magnitude and their removal will open up 3.2 miles of habitat for spawning and rearing steelhead/rainbow trout. Perennial flow conditions exist from the second lowest crossing in the watershed (Crossing 2) upstream with excellent habitat for spawning and rearing steelhead/rainbow trout. Throughout this middle-upper section of the creek, there are a number

of deep pools and undercut banks, with good riparian vegetation, channel complexity, and instream cover available. The presence of multiple age classes of steelhead/rainbow trout within this section of Quiota Creek confirms its importance as a spawning and rearing stream for endangered steelhead trout (USBR, 1999; AMC, 2008).

The primary objective of this Addendum is to add a third alternative for Projects #13 and #14 of the EIR/EIS, with each being an alternative design for the other. The project description evaluated in the EIR/EIS for Project #13 proposes permanent bridges be constructed on Crossings 2, 6, and 8 on Quiota Creek (Figure 1), and for Project #14 a rock riffle fishway for Crossings 3, 4, 5, 7, and 9 (Figure 2). This Addendum adds a third alternative, a bottomless-arched culvert, which could be constructed rather than a bridge or rock riffle fishway (Figure 3). The bottomless-arched culvert has the same benefit for fish passage, flood conveyance, and road safety as a bridge with comparable environmental impact (Figure 4) within the construction footprint, plus would be a superior design compared to a rock riffle fishway for fish passage and road safety. In addition, the landowners prefer the bottomless-arched culvert to the bridge due to its more subtle appearance and less visual impact.

As described in Section 10.9.1 and Table 10.2 of the EIR/EIS, *the two described designs could be alternatives for each other and subsequently would be covered in the EIR/EIS. The following alternative designs would be used by Reclamation or the County: (1) the County could utilize the rock fishway design at the County crossings (proposed bridges at Crossings 2, 6 and 8), described in Section 2.7.3. (2) Reclamation/COMB could utilize bridges at the crossings to be modified instead of rock fishways.*

Section 2.7.3 describes a rock fishway design to provide passage that would have a larger footprint than a bridge or a bottomless-arched culvert. Thus, between the two alternative designs presented in the EIR/EIS, the footprint of a bottomless-arched culvert and the potential environmental impacts would be the same as a bridge, hence would be within CEQA coverage for Projects #13 and #14 on Quiota Creek.

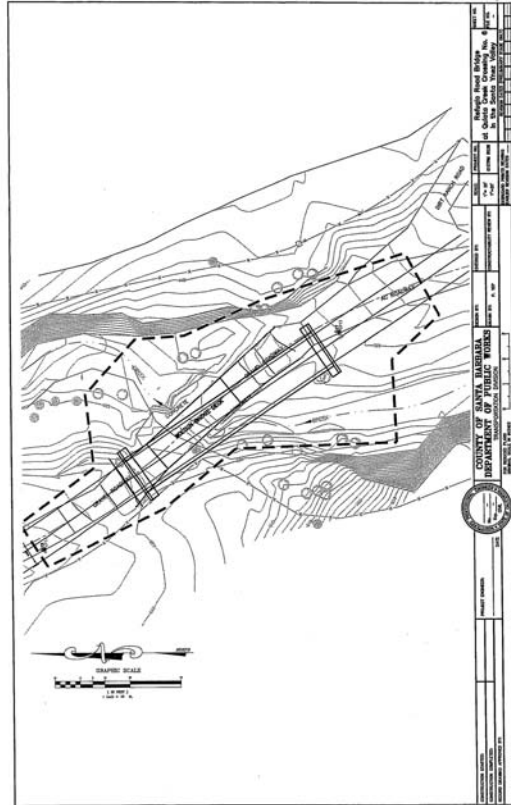


Figure 2-18. Proposed Bridge at Quiota Creek Crossing No. 6

Figure 1: An example of a bridge design, Crossing 6 as presented in the EIR/EIS.

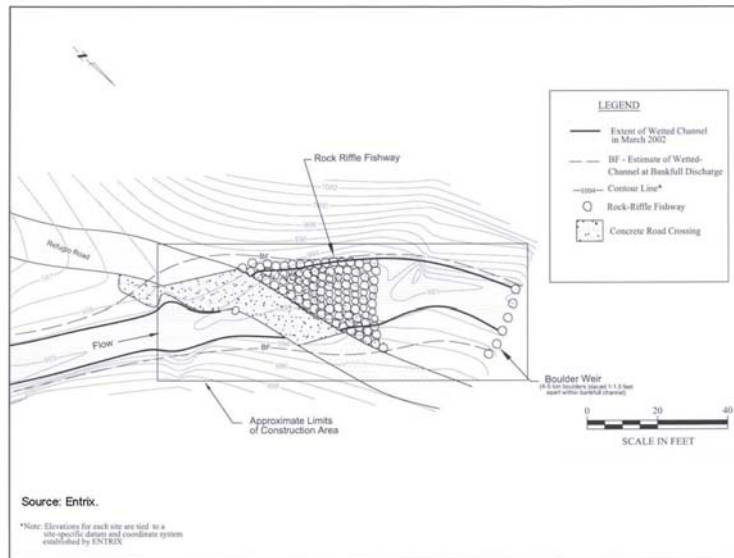


Figure 2-15. Proposed Fishway at Quiota Creek Crossing No. 7

Figure 2: An example of a rock riffle fishway, Crossing 7 as presented in the EIR/EIS.

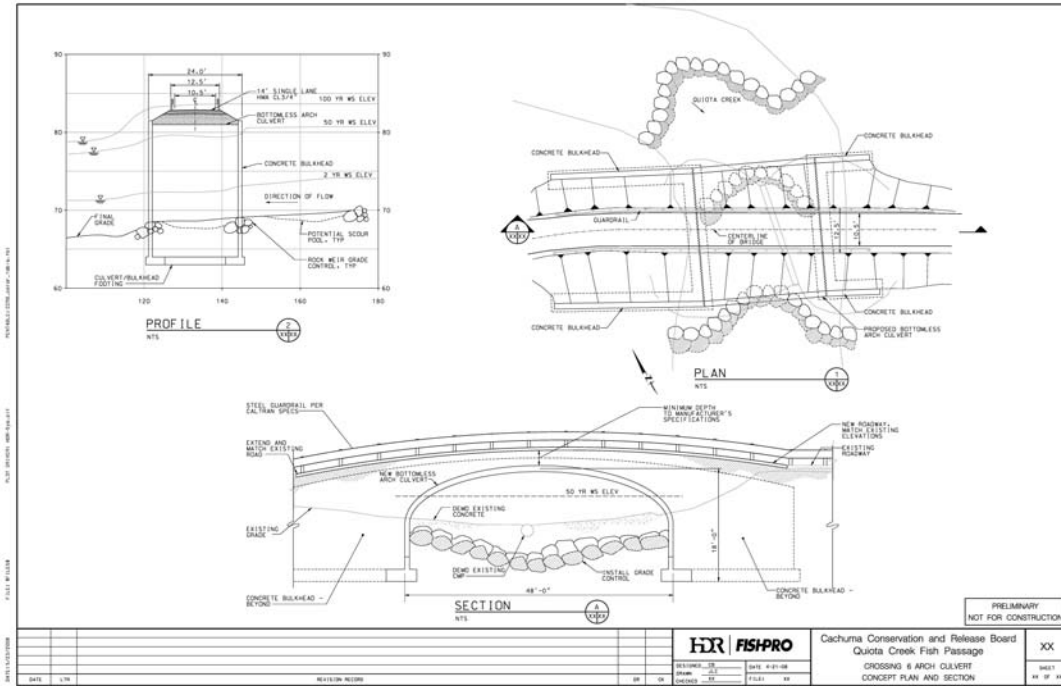


Figure 3: Preliminary drawings of the bottomless-arched culvert, an example prepared for Crossing 6.

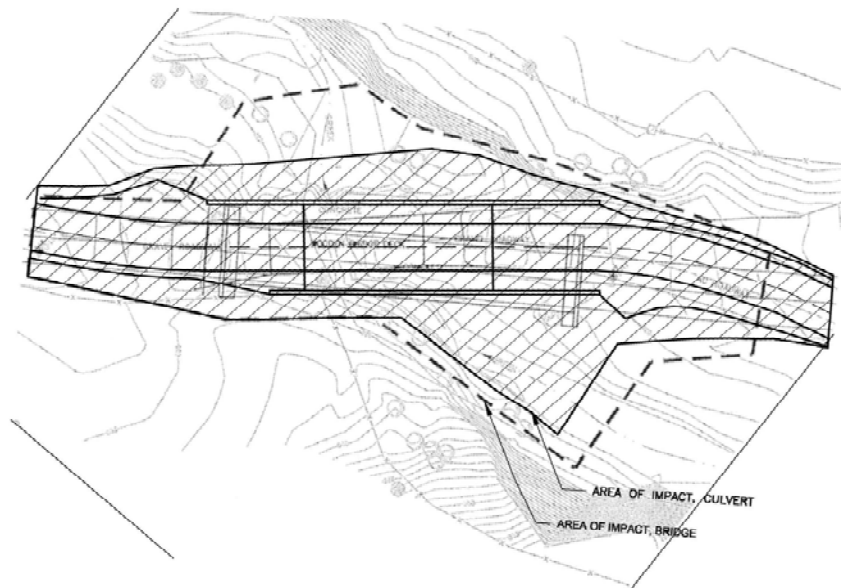


Figure 4: Comparison of proposed area of impact for a bottomless-arched culvert versus a free span bridge.

2.0 California Environmental Quality Act

CEQA Guidelines (§15164(a) and §15162) allow a lead agency to prepare an Addendum to an EIR if all of the following conditions are met. In the case of Quiota Creek, this refers specifically to the fact that a bottomless-arched culvert has environmental impacts that are equal to or less than the two alternatives approved in the present EIR/EIS.

- Substantial changes to the project do not require major revisions to the previously prepared EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes with respect to the circumstances under which the project is undertaken do not require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, which shows that;
- No new mitigation measures or alternatives which are considered different from those analyzed in the EIR or which were previously found to not be feasible are identified;
- No new information of substantial importance becomes available which shows new significant effects or significant effects substantially more severe than previously discussed;
- Only minor technical changes or additions are necessary to make the EIR under consideration adequate under CEQA; and
- The changes to the EIR made by the Addendum do not raise important new issues about the significant effects on the environment.

3.0 BOTTOMLESS-ARCHED CULVERT ALTERNATIVE DESCRIPTION

The existing low-flow crossings (Arizona Type crossings) or temporary wooden bridges sitting on top of damaged and abandoned low-flow crosses would be removed and would be replaced by bottomless-arched culverts that allow far superior fish passage, flood conveyance, and road safety to the existing condition. Most of the inlet culverts at the nine crosses are currently buried and all stream flow passes either over the concrete apron or under the damaged low-flow crossing. Under this third alternative, bottomless-arched culvert foundations and wing walls, bank stabilization materials upstream and downstream, road fill, and road approaches would be similar to a bridge, both providing a naturalized stream channel that would enable fish friendly passage upstream and downstream while improving road access and safety. The resulting

structure would be designed to convey the 50-year flood (with one foot of freeboard) and would need to withstand the 100-year flood event over the entire structure (CCRB, 2007). The bottomless-arched culvert would provide geomorphic continuity with the adjacent stream reaches such that channel degradation or erosion would be minimized and similar to the permanent bridge design. A bottomless-arched culvert has a diameter that is typically equal to or greater than the width of the natural active channel and is designed to allow for natural stream channel slope and configuration throughout its length while minimizing debris build up at the culvert inlet.

4.0 PROJECT LOCATION

Quiota Creek is a tributary of the Santa Ynez River in central Santa Barbara County, located approximately 39.6 miles inland from the Pacific Ocean to the east of the cities of Lompoc and Buellton (Figure 5). Quiota Creek enters the Santa Ynez River between the cities of Solvang and Santa Ynez. The Quiota Creek watershed is located in the lower half of the Santa Ynez River watershed, 8.4 stream miles downstream of Bradbury Dam which forms Lake Cachuma. The watershed drains approximately 7.6 square miles, with its headwaters originating in the north facing slopes of the Santa Ynez Mountain Range.



Figure 5: Overview of the Quiota Creek watershed.

Refugio Road is a County of Santa Barbara road that traverses Quiota Creek nine times along the middle reach of the creek. The first crossing (Crossing 1) is located 1.82 miles upstream of the confluence with the Santa Ynez River, and 3.2 miles of steelhead/rainbow trout habitat exists upstream of the crossing. The last crossing (Crossing 9) is located 3.2 miles upstream of the confluence with the Santa Ynez River with 1.81 miles of steelhead/rainbow trout habitat upstream.

5.0 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

A detailed environmental impact analysis for the proposed Quiota Creek barrier projects is included in Chapter 8 of the EIR/EIS (pages 8-1 through 8-15, Figures 2-10 through 2-19). Presented below are portions of the environmental analysis contained in the EIR/EIS that pertain specifically to free span bridge installations on Quiota Creek (COMB and USBR, 2004). Given the small change in footprint, the bottomless-arch culvert has the same or less impacts as the bridge evaluated in the EIR/EIS. Therefore, the following mitigation measures from the EIR/EIS are suitable mitigation for a bottomless-arched culvert.

Mitigation Measures and Residual Impacts (as quoted from 8.2.5 of the EIR/EIS)

1: A stream diversion and dewatering plan shall be prepared for each crossing to ensure that stream flows will by-pass the work site. In addition, an erosion control and spill contingency plan shall be prepared for each crossing, specifying best management practices to prevent erosion and sedimentation during and after construction, and procedures for containing and cleaning up spills of concrete or other materials during construction.

2: Temporarily disturbed areas shall be restored by grading to match natural contours, stabilizing creek banks with biotechnical methods that include riparian plants, and revegetating with riparian herbs, shrubs, and trees that occur along the creek. COMB shall prepare and implement revegetation plans that include at least a 3-year maintenance period, and a 3-year plant survival performance standard of 85 percent.

3: All large riparian trees over 12 inches in diameter that are removed shall be replaced at an appropriate initial planting ratio to ensure a 2:1 long-term replacement ratio. Replacement trees shall be planted at or near the crossings. COMB shall prepare and implement tree replacement programs that include at least a 3-year maintenance period, and a 3-year plant survival performance standard of 85 percent.

Temporary Construction Related Impacts (as quoted from 8.2.3 of the EIR/EIS)

Erosion and Sedimentation

*Construction activities in the creek bed and pouring concrete could result in discharge of sediments and concrete to the creek, which in turn could adversely affect aquatic life if the material is introduced to the creek after construction or during an accidental spill. **This impact is considered significant, but mitigable (Class II)**, because Reclamation, COMB, and the County will (1) divert water around the work site to prevent direct erosion of disturbed areas during construction; and (2) implement erosion control and spill contingency plans to contain any accidental spills or construction wash water, and to stabilize the affected areas after construction has ended. Additional protection would be provided through application of Mitigation Measure 1.*

Area of Impact and Habitats Affected

For the County crossings, the dimensions of the structures and estimated extent of work area for the bridges to be installed are shown on Figures 2-17 through 2-19. The work area will extend upstream and downstream about 75 to 100 feet at each crossing.

The total temporary construction disturbance zone would range from 9,000 to 14,000 square feet at each crossing. The total temporary disturbance zone for all three bridge crossings would be 0.75 acre. Installation of the bridges will include removal of the old roadbed and at-grade crossings; hence, the streambed under the bridge would be restored to natural conditions. The habitats that would be affected by construction include existing concrete aprons and debris associated with the crossings, aquatic habitat in the channel bottom, patches of emergent wetlands or riparian herbs along the channel bed margins, riparian trees and shrubs (e.g., oaks, willows and alders), and annual non-native grassland on the creek banks.

*The temporary disturbance of riparian habitat at each crossing (consisting of scattered patches of perennial herbs and small shrubs such as mulefat, poison oak, blackberry, watercress, young willows) is **considered significant, but mitigable (Class II)**, because the vegetation can be restored in the creek bed and on the adjacent banks after construction (see Mitigation Measure 2).*

The permanent loss of aquatic bed habitat and existing concrete debris at the crossings to be modified with rock fishways is not considered to be an adverse impact, as the existing concrete aprons and debris on the downstream side of these crossings will be replaced with a more natural substrate which will channel flows more effectively for fish movement. The removal of the road bed and modification of the channel bed upstream and downstream of the road to create a suitable flow line under the bridges are not considered adverse impacts because the creek bed would be restored to natural conditions using on-site materials and the crossings would be more suitable for fish passage.

Effect on Native Trees

At the County crossings, the following trees would be affected: Crossing No. 2 – removal of a 28-inch diameter alder and pruning of a 40-inch diameter coast live oak; Crossing No. 6 – removal of a 30-inch diameter sycamore, 40-inch diameter coast live oak, and five 10-inch diameter alder trees; and Crossing No. 8 – removal of a 50-inch diameter coast live oak, 15- and 20-inch diameter willow trees, and four 8-10 inch diameter alders.

*The loss of several mature native riparian trees, removal of several small trees, and pruning of several others is **considered a significant, but mitigable impact (Class II)**. This impact can be mitigated to a less than significant level by replacing the affected trees at the work site with native riparian trees (Mitigation Measure 3).*

Loss of Pool Habitat

Construction of the bridge at Crossing No. 6 would remove a pool upstream of the at-grade crossing. This would reduce available rearing habitat for rainbow/steelhead trout,

red-legged frog, and western pond turtle. Installation of the rock fishway at Crossing No. 7 would reduce the size of a deep downstream pool that could be used by the same species. **These impacts are considered adverse, but not significant (Class III)**, for the following reasons: (1) the loss of one pool and reduction in the size of another along this reach of Quiota Creek would be offset by the increased access to additional upstream pools that are currently inaccessible for steelhead; and (2) the loss of a single pool and reduction in the size of another would represent a minor effect on the total pool area along Quiota Creek.

Aquatic Species Capture and Relocation

Prior to construction, Reclamation, COMB, and County biologists would conduct surveys of the project site to search for red-legged frogs, western pond turtles, and steelhead trout. If necessary, any steelhead/rainbow trout, western pond turtle, and red-legged frogs that are present at or near the work areas would be relocated. These species will be captured and relocated using agency approved methods and personnel, and with the appropriate state and federal permits and approvals. The relocation of steelhead would be authorized under the BO. The relocation of the red-legged frogs would be authorized through a Section 7 consultation with USFWS associated with the Corps of Engineers 404 permit for the projects. Reclamation, COMB, and the County would also need to acquire approval to capture and relocate steelhead/rainbow trout, western pond turtle, and red-legged frog as part of a CDFG 1601 Streambed Alteration Agreement for the proposed projects.

Capture and relocation of these species is an environmental protection measure that is considered a standard operating procedure for the SYRTAC and has been successfully implemented on previous occasions in the watershed related to operating fish traps. Any disturbance or adverse effects to these species would be minimal and acceptable to the resource agencies. **As such, any incidental adverse impact of temporary relocation would be considered adverse, but not significant (Class III).**

Disturbance of Upland Habitats

Construction of engineered fill slopes for the bridge approaches at Crossing Nos. 2, 6, and 8 will temporarily disturb about 15,000 square feet of upland habitats consisting of annual grassland and oak woodland understory. About 5,000 square feet of the same habitat would be permanently removed. **The impacts to upland vegetation on the banks is considered adverse, but not significant (Class III)**, because of the small area involved and because the disturbed areas will be restored after construction. This impact does not include the loss of mature oak trees (see above).

Noise, Dust, Traffic Impacts

Construction activities would involve increased human presence along the project reach, and noise and emissions from vehicles and construction equipment. These construction-related impacts could discourage wildlife use along this portion of Quiota Creek during the day when construction is occurring. **This impact is considered an adverse, but less than significant impact (Class III)** because it would be restricted to daytime hours over one, and possibly two summers.

Cultural Resources

An investigation of the potential presence of archeological resources along the project reach was conducted by Conejo Archeological Consultants (2002). All ground disturbances would occur in and adjacent to the creek which does not contain cultural deposits. No cultural materials (e.g., bedrock mortars) have been observed at the crossings. Hence, impacts to archeological resources are not anticipated.

Interference with Cattle Grazing

Construction of the County projects is anticipated to require approximately three weeks per crossing or a total of nine weeks. Refugio Road would be closed during this period. The County will provide alternative access for landowners and grazing lessees. The road will not be closed during construction of the rock fishways at other crossings.

Fencing near the crossings will be temporarily relocated 5 to 20 feet to exclude cattle from the work area.

The existing ranch roads that cross Quiota Creek (at grade crossings) along the inside perimeter of the fences that cross the creek would not be removed or affected by construction work.

These temporary effects on cattle grazing operations along the creek are considered adverse but not significant (Class III).

Operations-Related Impacts (as quoted from 8.2.4 of the EIR/EIS)

Modification of the existing crossings will improve passage conditions for steelhead along Quiota Creek. The improved conditions could result in greater numbers of adults traveling up Quiota Creek. Steelhead/rainbow trout already occur in the creek. Hence, additional trout use is not expected to cause any new indirect impacts on existing land uses.

6.0 CONCLUSIONS

The proposed modification of the EIR/EIS to add a third alternative design of bottomless-arched culverts for options for fish passage impediment fixes on Quiota Creek will have no additional impacts beyond that described in the EIR/EIS for the Cachuma Project. The Quiota Creek Watershed Plan (CCRB, 2007) which was a guidance/planning document created by stakeholders (landowners, regulators, and fish passage engineers) to evaluate fish passage fixes for each of the nine low-flow crossing, found that a bridge and a bottomless-arched culvert had the same passage benefit for steelhead/rainbow trout, flood conveyance, and road access and safety. Finally, the bottomless-arched culvert alternative is preferred by landowners in that area of the watershed.

The evaluation completed in this addendum finds that the environmental impacts and environmental mitigation of the bottomless-arch culvert would be the same as those alternatives described in the EIR/EIS in the original project proposal. No additional adverse environmental

impacts will result from the adding a third alternative design option. This Addendum serves as a modification to the CEQA administrative record and will be sent to the State Clearinghouse.

Culvert design and construction technologies, particularly for bottomless-arched culverts, have significantly evolved since drafting the EIR/EIS. New designs have made this a viable alternative to a bridge and rock riffle fishway at equal or less environmental impact, for lower cost, and less visual impact which were concerns of the stakeholders while providing the desired flood conveyance, fish passage, road access, and road safety. The bottomless-arched culvert alternative does not cause any further environmental impact that is not already described in the EIR/EIS, hence does not require any significant revisions to the EIR/EIS.

7.0 REFERENCES

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