EXHIBIT 2

City of Pacifica
Capistrano Bridge Fish Passage Project
Initial Study/Mitigated Negative Declaration

May 2003

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CAPISTRANO BRIDGE FISH PASSAGE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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I. Introduction

This Initial Study/Mitigated Negative Declaration addresses the potential environmental impacts associated with fish passage improvements to the Capistrano Bridge area of San Pedro Creek in the City of Pacifica. These fish passage improvements consist of reinforcing the existing footings of the Capistrano Street Bridge by raising the bottom elevation of the stream channel, removing the temporary weir (fish ladder) (which has segments both upstream and underneath the Capistrano Bridge), and the construction of a new step-pool fish passage system that is natural in appearance that will allow spawning steelhead to migrate upstream past this point. Restoration of 1300 feet of creek will also be accomplished as part of this project.

In addition to specific site surveys and analysis, this Initial Study incorporates environmental data contained in the following documents:

- Biological Assessment for the Steelhead for the Capistrano Bridge Fish Passage Project, Pacifica, CA. January 31, 2002, revised February 12, 2003. Prepared by L.C. Lee Associates (LCLA) for the City of Pacifica;
- Biological Assessment for the California Red-legged Frog for the Capistrano Bridge Fish Passage Project, Pacifica, CA. February 5, 2002, prepared by LCLA for the City of Pacifica; and
- Joint EIR/EIS for the San Pedro Creek Flood Control Project, Pacifica, CA (January 1998), prepared by the City of Pacifica and the U.S. Army Corps of Engineers, San Francisco District.

The analysis contained herein demonstrates that the proposed project will not have any significant environmental impact after mitigation measures have been implemented.

This Initial Study/Mitigated Negative Declaration has been prepared in compliance with the California Environmental Quality Act (CEQA)(Public Resources Code 21000 et seq.) and the State CEQA Guidelines (California Administrative Code 15000 et seq.), as amended. According to Section 15070 of the CEQA Guidelines:

"A public agency shall prepare or have prepared a proposed Negative Declaration or mitigated negative declaration for a project subject to CEQA when:

(a) The Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or

(b) The Initial Study identifies potentially significant effects but:

(1) Revisions in the project plans or proposals made by or agreed to by the applicant before a proposed mitigated negative declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

(2) There is no substantial evidence, in light of the whole record before the agency that the project as revised may have a significant effect on the environment.

The CEQA Guidelines Section 15382 defines a significant effect on the environment as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, mineral, flora, fauna, ambient noise, and object of historic or aesthetic significance.

This document has been prepared as an objective, full-disclosure report to inform agency decision makers and the general public of the direct and indirect physical environmental effects of the proposed action and any measures to reduce or eliminate potential adverse impacts. This document has six sections:

1. **Summary.** This section briefly describes the development project and lists the potentially significant environmental impacts that have been reduced to less than significant levels with mitigation incorporated into the project. A table of all the mitigation measures is presented.
2. **Project Description.** This section provides a vicinity description of the project site and a description of the proposed subdivision and site improvements.
3. **Initial Study Checklist.** The Initial Study Checklist is a standard form used to examine the full range of potential environmental effects and is the basis used to determine the elements of the Negative Declaration. The form is based upon the 1999 California Environmental Quality Act (CEQA) Guidelines.
4. **Responses to the Checklist Questions.** The Response section provides detailed answers to the questions on the Checklist and identifies potentially significant impacts, mitigation measures to reduce those impacts, and a conclusion of impact after mitigation.
5. **References.** CEQA Guidelines state that a brief explanation is required for all answers except "No Impact " answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
6. **Report Preparers.** This section identifies the consultants who prepared this project.

S. Summary

This Initial Study/Mitigated Negative Declaration describes the potential environmental impacts associated with the Capistrano Bridge Fish Passage project. The Initial Study identifies potentially significant impacts and identifies mitigation measures to reduce the impacts to less than significant. The project impacts and mitigation measures are summarized below in Table 1. Since the project does not involve a direct change in the physical environment, the potential environmental effects of the project are limited to: aesthetics, biology, geology, hydrology, land use, and recreation.

TABLE 1
SUMMARY OF MITIGATION MEASURES

Air Quality	
IMPACT: The proposed upgrade of the Capistrano Street Bridge, removal of existing fish ladder and creek restoration will not generate permanent air pollutants or create air quality impacts. However, sensitive receptors could be exposed to air pollution emissions and high levels of dust during the construction phase of this project. Construction Best Management Practices (BMPs) as listed in the Bay Area Air Quality's CEQA Guidelines (1996) shall apply as mitigation measures: **Potentially Significant Impact**	**Mitigation AQ-1:** The following construction related Best Management Practices (BMPs) shall apply: 1. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. 2. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. 3. Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph **Less than Significant Impact After Mitigation**
HYDROLOGY	
IMPACT: Direct effects from the construction of the bridge and fish passage system associated with the Capistrano Bridge Project could include (1) temporary degradation of habitat during the restoration of the stream reach and (2) temporary dewatering of that portion of the creek bed under construction for restoration, These effects, however, will be temporary and construction will be conducted during the low water months (July-August) and under consultation with the	**Mitigation HYD-1 Dewater Creek During Construction.** If water is present at the work site, a diversion structure (which can be made of various materials sheet piles, inflatable dams, sand bags, river run gravel, or other similar materials) shall be constructed, as needed, to isolate the work area and avoid or minimize downstream water quality impact. Stream water will be diverted around the work site in a pipe (pumped or gravity). 1. All water shall be discharged from the pipe back into the stream below the project site in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic). 2. Sumps or basins may also be used to collect water (if the creek has low flows during the construction phase). 3. In conjunction with the diversion structure, pumps or gravity-fed pipe systems may be used to de-water sites.

NMFS, the USFWS and the CDFG so as to avoid water quality and water availability impacts on steelhead and red-legged frogs. Indirect effects could include (1) introduction of a small amount of sediment into the stream channel through the removal of existing vegetation and the construction of the dirty. riprap, (2) temporary elevation of water temperature through the removal of existing riparian vegetation within the construction reach, and (3) temporary disruption of longitudinal connectivity within the restoration reach at the Capistrano Bridge. The first two indirect effects may persist for a short time beyond the construction interval. However, should they occur, it is not expected that either will persist beyond the first two growing seasons. Shortly after the nursery stock has established within the restoration site, fine root biomass produced in the upper soil profile will stabilize the newly planted slopes. Additionally, tree and shrub canopies will close and provide shade to the instream environment within the first two to five years. Appropriate Best Management Practices (BMPs) as part of the Storm Water Pollution Prevention Plan (SWPPP) will be in place throughout the construction process to avoid and minimize any water quality degradation as a result of grading operation on the site. In addition to the use of BMPs, the City will perform water quality monitoring to make sure the BMPs are working properly to assure there is no discharge of pollutants from the site. **Potentially Significant Impact**	4. Because the creek supports an anadromous fishery, diversions shall maintain habitat connectivity and result in no changes in flow quality or quantity from pre-project conditions. 5. Bypassed flows can be slowly reintroduced into the dewatered area by leaving a silt barrier in place to allow water to slow and drop sediment to the extent possible. **Less than Significant Impact After Mitigation** **Mitigation HYD-2 Avoid Erosion When Restoring Flows** All temporary diversion structures shall be removed within 48 hours of completion of work. Flows shall be restored in a manner that minimizes erosion. 1. When diversion structures are removed, to the extent practicable, the ponded flows will be directed into the low-flow channel within the work site to minimize downstream water quality impacts. 2. Flows shall gradually be restored to the channel to avoid a surge of water that would cause erosion or scouring. **Less than Significant Impact After Mitigation** **Mitigation HYD-3 Erosion and Sediment Control Measures** Erosion control measures shall be used as appropriate to control sediment and minimize water quality impacts. Appropriate measures include, but are not limited to, the following: 1. Silt Fences 2. Straw Bale Barriers 3. Brush or Rock Filters 4. Erosion Control Blankets and Mats 5. Soil Stabilization i.e.: Tackified straw with seed, jute or geotextile blankets, etc. **Less than Significant Impact After Mitigation** **Mitigation HYD-4 Handle Sediments So As to Minimize Water Quality Impacts** If sediment needs to be removed from San Pedro Creek, it shall be stored and transported in a manner that minimizes water quality impacts. 1. Wet sediments must be stockpiled within the dewatered portion of San Pedro Creek so water can drain or evaporate before removal. This measure applies to saturated, not damp, sediments. 2. Water draining from stockpiles will not be allowed to flow back into the creek. Silt fences shall be installed along the entire portion of the area downstream and down slope from any stockpile. 3. Streets shall be cleaned of mud and/or dirt by street sweeping, as necessary, and not by hosing down the street. **Less than Significant Impact After Mitigation**

II. Project Description

A. PROJECT LOCATION AND SITE DESCRIPTION

The City of Pacifica (City) is located along the Pacific Coast in northwest San Mateo County, three miles south of the City of San Francisco (Figure 1). The City is situated among three isolated valleys and open hillsides, as well as beaches and rocky bluffs. It is surrounded on three sides by the Santa Cruz Mountains and by the Pacific Ocean on the west.

San Pedro Creek is a perennial (year-round) steelhead stream in the southern portion of the City, with a 7.99 square mile watershed. San Pedro Creek is considered by many to be a unique biological resource in the greater San Francisco Bay region (Titus et al.1997), because it is one of only four Central California Coastal streams that still support a viable anadromous fishery. San Pedro Creek is, in fact, the only stream with a steelhead population along a 25-mile reach of coast between the Golden Gate Bridge and the City of Half Moon to the south (LCLA 2002). The fishery still exists within the watershed in large part because the cool springs in the headwaters of San Pedro Creek are protected within the Golden Gate National Recreation Area (GGNRA).

The project site is located along San Pedro Creek, in the middle Linda Mar residential district of the City (37° 34.030' N latitude and 122° 29.030' W longitude); see Figure 2. The creek has a narrow riparian corridor in the area of the Capistrano Bridge as the back yards of houses line the creek on both sides both above and below the bridge. The locations of the work areas are illustrated in Figure 3.

B. PROJECT OBJECTIVES

This project is sponsored jointly by the City of Pacifica and the U.S. Army Corps of Engineers. The primary objectives of the project are to:

(1) Repair the Capistrano Avenue Bridge at San Pedro Creek, thereby restoring the integrity and stability of the structure,
(2) Provide a permanent solution to allow for the passage of the federally protected steelhead throughout this reach of San Pedro Creek, and
(3) Restore the stream/wetland ecosystem functions to San Pedro Creek in and adjacent to the Capistrano Avenue Bridge crossing of San Pedro Creek.

It is the purpose of this Initial Study to assess the environmental effects associated with the project proposal in accordance with the California Environmental Quality Act (CEQA). Because the project will be awarded federal funding through the US Army Corps of Engineers, the environmental effects must also be analyzed in accordance with the National Environmental Policy Act (NEPA). The specific USACE project is described in Section F, below.

Bridge Repair

The bridge at the Capistrano Avenue crossing of San Pedro Creek was built in 1932 as a one-lane structure. In 1952, the bridge was expanded and lengthened to its current two-lane configuration. A Denil fish ladder also was installed (S. Holmes, pers. comm. to LCLA, 2002). Pacifica residents heavily utilize this bridge because it is one of the few road crossings of the

main stem of San Pedro Creek within the Linda Mar neighborhood. It connects the north and south neighborhoods of the eastern Linda Mar district. School buses, city buses, and local automobile traffic continuously cross this bridge. However, within the last decade, due to a series of highly erosive stream flows, Capistrano Bridge has become increasingly unsafe for human traffic.

Specifically, recent channel erosion and entrenchment by San Pedro Creek have undercut the Capistrano Bridge footings. Entrenchment also has eroded the stream banks immediately downstream of the bridge. Both channel entrenchment and stream bank erosion constitute serious threats to the integrity to the bridge as well as to the adjacent private homes and apartment complexes on the south bank. The integrity of the Capistrano Bridge is so compromised that it was determined to be dangerous to the public by a local structural engineering firm (SURE Engineers, Inc. 2002), Pacifica's Director of Emergency Services, and the Pacifica City Council.

With respect to the structural assessment, Mr. Carl Chan (SURE Engineers, Inc.) surveyed the bridge on August 29, 2002, and determined that approximately 10 feet on both sides of the bridge's underfooting are not supported. Additionally, Mr. Chan noted that five feet of downcutting of the creekbed has occurred over the last four years. He projected that this stream entrenchment would continue at a similar rate. Overall, the bridge is considered a severe structural concern due to (1) its age, (2) the condition of the existing concrete, (3) the existing undermined footing, and (4) the continued undercutting of bridge abutments. Mr. Chan concluded that the Capistrano Bridge poses an extreme life and safety hazard, and urged that the bridge be closed immediately and remain closed until the bridge is repaired to eliminate the potential for loss of human life and injury due to its collapse (SURE Engineering, Inc. 2002).

In response to Pacifica's assessment of the bridge's structural integrity, the Director of Emergency Services of the City of Pacifica proclaimed the Capistrano Bridge to be a local emergency. According to the proclamation, the safety of humans and property are in extreme peril. As a result of the engineering assessment and the local proclamation, the Capistrano Bridge crossing was closed to the public on August 29, 2002. On September 9, 2002, the City Council of Pacifica signed a resolution endorsing the emergency repair of the Capistrano Bridge.

Allow Fish Passage

The Capistrano Bridge currently is viewed by the regulatory agencies, (i.e., National Marine Fisheries Service (NMFS) and the California Department of Fish and Game (CDFG)) as a barrier to steelhead migration, as determined by NMFS staff at a site visit in January 2001. According to NMFS, no action to remediate the creek entrenchment at the failed fish ladder represents a "take" by the City under §4(d) of the U.S. Endangered Species Act (ESA), as amended. The City has been directed by NMFS to remove this barrier immediately in order not to be found in violation of the ESA's §4(d).

In the late winter of 2000-2001, the City responded to the agencies' concerns by constructing a temporary weir to improve fish passage at the Capistrano Bridge. Specifically, between April 6 and 12, 2001, the City, in cooperation with its consultants (LCLA, Seattle, Washington; Go Native Nursery, Moss Beach, California), and its general contractor (Power Engineering, Alameda, California), constructed a temporary weir step-pool complex, consisting of a series of two pools that provide resting habitat for migrating steelhead. A total of 1,984 tons of boulders were placed as fill in San Pedro Creek to construct the temporary weir complex, with an addition of approximately 45 ft3 of stones and 125 ft3 of sand bags. Total fill volume was 2,154 cubic feet. The weir complex was constructed to last a minimum of two winters, and

maintenance of the weirs is under the direction of the Department of Public Works. This work was authorized by Department of the Army Nationwide Permit No. 18 (Regulatory Permit No. 25971S), issued by the San Francisco District, Corps of Engineers, on March 26, 2001.

San Pedro Creek Restoration

The City of Pacifica is engaged in a large, citizen-supported effort to restore the San Pedro Creek watershed. The earliest efforts date to the mid-1980s when the local citizenry, public officials, and the U.S. Army Corps of Engineers engaged in a long period of discussion for the development of a flood control project which could be environmentally acceptable to the town's citizens. The result was a flood control project that provides the control of floodwaters in a restored floodplain at the lower reach. Additionally, the San Pedro Creek Watershed Coalition (Coalition) was formed in the late 1990's by local citizens to help restore the creek. The Coalition is a non-profit citizen's group that has received funding for several projects in the creek, including the removal of non-native species and the replacement of a failed culvert in the upper watershed within San Pedro County Park.

The San Pedro Creek Wetland Ecosystem Restoration and Flood Control Project is a $7 million public works project that is jointly planned, authorized permitted and constructed by the U.S. Army Corps of Engineers (ACE) and the City. In August 2000, construction began on the first of two phases of the project.

City officials also have initiated restoration of an additional reach of San Pedro Creek, which extends from the eastern most limit of the current restoration project job (i.e., Linda Mar Convalescent Hospital) to the Peralta Street Bridge. This restoration is considered Phase III of the waters/wetlands ecosystem restoration of lower San Pedro Creek. Initial design is underway to lay back the south bank along this 1,300 ft reach, remove non-native vegetation, widen the channel, and replant with native species in a plant community type complex identical to the lower restoration effort.

C. PROJECT CHARACTERISTICS

Bridge Repair

1. Operational Improvements to Capistrano Bridge

With respect to the structural stability of the Capistrano Street Bridge, it will be primarily reinforced by burying the footings as a result of raising the bottom elevation of the stream channel. If necessary, additional reinforcement may be accomplished by injecting concrete into the existing structure to shore up the bridge's bulk footings. Old concrete will be replaced or reinforced. Construction will be performed during low water intervals to limit the potential of fresh concrete coming into contact with creek waters.

2. Civil Construction to Prevent Further Entrenchment at the Capistrano Bridge

The overall streambed will be approximately graded to achieve a 17.4 feet elevational difference over 700 feet. Grouted rock cut off walls will be spaced at 26 feet on the center, with an eight-inch elevation drop between walls (Figure 4). Two to six ton rocks will be placed on either side of the streambed, and the spacing of the rocks will allow willows to grow quickly to provide shade over the stream. Plant community restoration will have the overall effect of increasing microtopographic roughness through slope rugosity, as well as increasing

significantly vegetative roughness. Increase in roughness will slow water as it moves through the restoration reach.

Allow Fish Passage

1. Construction of the Fish Passage Step-Pool Complex

Construction activities within the bed of San Pedro Creek will involve the removal of the existing fish ladder, which has segments both upstream and underneath the Capistrano Bridge and the construction of a new step-pool fish passage system that is natural in appearance that will allow spawning steelhead to migrate upstream past this point.

Conceptual designs of the fish passage systems currently are based on a series of step pools that rise in elevation from down gradient of each bridge to some distance up gradient of each bridge (Figures 4 and 5). Pools will be large enough to support a "dead zone" that allows resting habitat, and deep enough to allow fish to jump to the next pool. Between each pool will be a short run to allow fish to pass without much effort.

An important design feature for the custom fish passage complex is a construction that allows for juvenile steelhead to move along the channel in a variety of flows (*i.e.*, between 20-95% exceedance flows). In addition, the fish passage will minimize the jumps juveniles will have to negotiate, limiting the jumps to 6 inches in faster moving waters to 2 ft in slower waters. In terms of the adult steelhead, the jumping pool depth will be at minimum three ft at the base of the fall, greater than the length of the fish. A minimum of ten feet will exist between jumping pools, and a maximum spacing between larger resting pools will be approximately 100 feet.

2. Longitudinal Connectivity in San Pedro Creek

Freshwater riparian wetlands are considered among the most threatened ecosystems along the California Coast (California Coastal Conservancy 1993). This proposed mitigation plan for the Calera Parkway Expansion Project, designed by L. C. Lee Associates (LCLA), uses the hydrogeomorphic functional assessment method (HGM) which includes four broad categories of ecosystem functions performed by riverine wetlands (Brinson *et al.* 1995). These four categories include (1) hydrology, (2) biogeochemistry, (3) maintenance of native plant communities, and (4) faunal support/habitat. The habitat/faunal support waters/wetlands ecosystem function is emphasized in this project because of the known occurrences of two vertebrate species of conservation concern. Using HGM, waters/wetlands in a geographic region are assigned to a class of wetlands, such as riverine, depressional or lacustrine. The class of waters/wetlands is then refined to the subclass level, *e.g.*, 3rd order stream).

a. Hydrology

The City's design team has set as the project target for the restoration of hydrologic functions on the restoration site: restore a more natural site water balance to San Pedro Creek at the Capistrano Bridge crossing. Restoration of a more natural site water balance will guide other elements of the restoration project (*e.g.*, restoration of native plant communities). The following project standards will be used to guide the final design and to attain the project target: (1) remove 669 ft long concrete culvert upstream of the Capistrano Bridge, and (2) create a step-pool complex over an approximately 2,000 ft reach to remove existing barrier to fish passage.

Achieving these project standards will have the overall effect of a modest increase in the restored reach's ability to store both surface and subsurface water. This will be accomplished primarily by the removal of the concrete culvert.

b. Biogeochemistry

Based upon the reference standards for the Central California Coast (LCLA 1996), the LCLA design team has set the following project target for the restoration of the biogeochemical functioning: increase water residence / contact time within the riparian zone of San Pedro Creek up and down stream of the Capistrano Bridge. The following biogeochemistry project standards will be used to guide the final design and to attain the project target: (1) lay back side slopes and plant with palustrine scrub-shrub and emergent vegetation, (2) remove 669 ft long concrete culvert upstream of the Capistrano Bridge, and (3) install native plants species on the site with tree/sapling stem density = 241 to 403 stems/acre.

Achieving the project standards will have the overall effect of increasing slight microtopographic roughness through slope rugosity, as well as increasing significantly vegetative roughness. Increase in roughness will slow water as it moves through the restoration area. Slowing water movement through the site will allow more sediment (and elements and compounds sorbed to sediment particles) to settle out in the restoration area.

c. Plant Community

The plant community project target is to restore a self-sustaining native riparian forest and scrub shrub community within the project site. Based upon the reference standards for the Central California Coast (LCLA 1996), the LCLA design team has set the following project standards to attain the project target: (1) tree cover greater than 59% cover of native tree species, (2) shrub cover greater than 21% cover of native shrub species, (3) 70% or more survivorship of planted stock, and (4) 75% or more of dominant plant species in each strata are native. Achieving the project standards will result in the development of native plant communities that closely resemble reference standard conditions in riparian zones on the Central California Coast (LCLA 1996).

Seven plant community types are designed for the fish passage restoration site. These include: (1) Palustrine scrub-shrub community along the riparian corridor, dominated primarily by Arroyo and Sitka willows (*Salix lasiolepis* and *S. sitchensis*, respectively), with Red alder (*Alnus rubra*) also present; (2) Palustrine scrub shrub found primarily along the stream terraces, dominated primarily by Arroyo willow; (3) Palustrine scrub shrub community type planted along the steeper side slopes, dominated primarily by Arroyo and Sitka willows; (4) Palustrine forest along the riparian corridor, dominated by Red alder and Yellow willow (*S. lucida* subsp. *lasiandra*); (5) Palustrine forest dominated only by Red alder; (6) Palustrine emergent (persistent) planted along the creek margin, dominated by rushes and sedge (e.g., *Scirpus microcarpus*); and (7) Palustrine emergent (persistent) along the slopes dominated by rushes (*e.g., Juncus patens*) that tolerate relatively drier site conditions.

d. Faunal Support/Habitat

The faunal support/habitat project targets are to restore longitudinal connectivity to the main stem of San Pedro Creek at the Capistrano Bridge crossing and to restore dense vegetation to the riparian corridor along the project reach. The project standards are (1) remove the abrupt and prohibitive changes in the channel that prevent movement through the reach, (2) plant community structure is mixed with both trees and shrubs, and (3) leaf litter coverage is between 50 and 100%.

Achieving the project standards will allow unrestricted movement through the reach by the Central California Coast ESU, as well as provide habitat for species typical to riparian zones on the Central California Coast, including the federally threatened California red-legged frog (*Rana aurora draytonii*).

San Pedro Creek Restoration

The project includes the restoration of the currently degraded riparian plant communities along approximately 1,890 linear ft of the stream reach of the creek surrounding the bridge. Restoration activities will start approximately 1,340 ft downstream of the 40 ft wide Capistrano Street Bridge and continue approximately 550 ft upstream of the bridge. The City holds a 50 ft easement in this reach, and as such, has unimpeded access to work in the creek. Native plants typical of the central coast watersheds will be installed on both the north and south banks of San Pedro Creek at the fish passage site. Planting stock will be collected from within the watershed .

Additionally, the downstream pool at the Capistrano Bridge now holds considerable amounts of urban refuse, most notably small pieces of concrete, rebar, and other miscellaneous reasonably immobile debris. All of this will be removed by the contractor implementing the project during the project construction.

1. Planting Plan

Non-native weeds and escaped ornamentals that have become established along the creek banks will be removed. Existing slopes within the project site will be regraded and reinforced where necessary with "dirty riprap" (riprap with soil) that will be planted with the native plant species (*e.g.*, Arroyo willow [*Salix lasiolepis*], Red-stem dogwood [*Cornus sericea* subsp. *sericea*], *etc.*) to resemble a natural and undisturbed creek of California's Central Coast.

The composition of native plant communities to be planted onsite is based on reference wetlands found along the Central California Coast (LCLA 1996). Plant community types to be installed have been derived from communities with ecologically similar habitats, and are based on the relative abundance of each species in the reference waters/wetlands. Individual plants in each community will be planted in polygons or areas marked in the field according to the draft planting plan. The existing environmental conditions will be modified according to previous sections, to provide ideal growing conditions that are similar to those at reference wetland ecosystems.

A mosaic of native plant species typical of Central California Coast riverine ecosystems will be planted in a series of plant community types. The three plant communities to be planted on the restoration site include: (1) Palustrine scrub-shrub community along the riparian corridor that is dominated by willows, (2) Palustrine forest plant community along the riparian corridor that is dominated by alder and willow, and (3) Palustrine emergent that is dominated exclusively by rushes and sedges and forbs and ferns.

D. INTENDED USES OF INITIAL STUDY

The City of Pacifica is the Lead Agency for this project and will use the Initial Study to determine potential environmental impacts resulting from the proposed project. The analysis of potential environmental impacts is based on the Initial Study Checklist.

The California Department of Fish and Game is a responsible agency as it is responsible for protecting state species of special concern and will be issuing a Stream Alteration Agreement for work conducted in San Pedro Creek.

The U.S. National Marine Fisheries Service will permit activities that could take or result in impacts to habitat of the federally listed steelhead. The U.S. Fish and Wildlife Service will permit activities that could take or result in impacts to habitat of the federally listed California red-legged frog. The federal agencies will conduct their own environmental review through the Section 7 consultation process.

This document also serves as an Environmental Assessment under the National Environmental Policy Act (NEPA) and will be used by the U.S. Army Corps of Engineers (see Section F. below).

E. MITIGATION INCORPORATED INTO THE PROJECT

1. Construction Timing

Demolition of the existing fish ladder and its replacement by a fish passage system will necessitate by-passing the creek throughout the length of the project. Thus a temporary creek by-pass will be constructed at the upstream extent of the project and continue to the downstream terminus. All construction will take place during the low water period specified by NMFS and DFG. The project currently is scheduled for construction from July through August 2004. Importantly, construction during the dry season will serve to limit erosion and subsequent sedimentation downstream of the construction reach.

2. San Pedro Creek By-Pass Construction and Maintenance

Because it is possible that juveniles and adults may become entrained in the by-pass culvert, a clear zone of intake to the pipe will be delineated, and a sump pump installed with a barrier to prevent intake of fish into the by-pass system. A similar sump pump/pipe/screen barrier will be installed at the downstream end of the reach, but in a reverse order. Prior to installation of the creek by-pass, the creek will be swept for fish and then blocked to prevent movement into the construction reach. The creek will be surveyed daily prior to initiation of construction activities to remove any fish that might attempt to utilize this reach of creek.

Additionally, the City will establish a contingency plan for fish entrainment. Contingencies measures, if necessary, will be directed by the observing wetland ecologist and/or fish biologist. In the event of a rare summer storm, a protocol for emergency response will be in place to ensure that storm water does not overwhelm the by-pass system. This protocol is listed in the Hydrological Section of this document, in Chapter III.

3. Step-Pool Complex

The overall goal of the project is to remove a barrier to fish passage within San Pedro Creek. As such, the project is one that specifically addresses limits to the viability of an endangered fish run and therefore, the project itself represents a long-term conservation measure.

4. Exclusion of Reptiles and Amphibians from Work Area

Perimeter fencing will be installed before any grading occurs on the site. The fencing will be designed to U.S. Fish and Wildlife Service specifications to preclude all reptiles and amphibians from entering the work area. The exclusion of these animals from the work area should eliminate direct mortality that may result from construction activities. In addition, prior to construction, the LCLA/City team, along with a qualified (i.e. FWS-approved) biologist will sweep the construction area to remove and relocate individual reptiles and amphibians to a FWS-approved receptor site.

5. Exclusion of Steelhead from the Construction Zone

As described above, steelhead will be excluded from the work area prior to construction. Prior to daily construction, a FWS/NMFS -approved biologist will survey the reach of creek under construction and remove any fish that may have entered the reach during the off-hours.

6. Riparian Restoration Design

The restoration design for the creek banks and adjacent riparian zone includes the planting of native species that will provide, within two growing seasons, significantly more shade over the reach where the fish passage system will be installed. This shade will serve to lower or maintain cool water temperatures that are in part, a consequence of the cool base flow in San Pedro Creek.

7. Sediment and Erosion Control

Appropriate Best Management Practices (BMPs) per the Stormwater Pollution Prevention Plan ("SWPPP") will be in place throughout the construction process to avoid and minimize any water quality degradation as a result of grading operation on the site. These BMPs are outlined in the Hydrological Responses section in Chapter III of this document. In addition, water quality monitoring will occur to help the City target problem areas on the site that require additional best management practices to avoid the discharge of poor quality storm water to jurisdictional waters/wetlands.

8. Bullfrog Control

It has been demonstrated that the bullfrog (*Rana catesbeiana*) populations have an adverse effect on the California red-legged frog (USFWS 2000). Currently, there have been no reports of bullfrogs at the project site, although given the large size of the watershed; they may exist within the drainage. The City has agreed to control bullfrogs to the extent possible throughout the City's waters/wetlands ecosystem restoration sites, including the San Pedro Creek Waters/Wetlands Ecosystem Restoration and Flood Control and the Calera Creek Wetland and Riparian Ecosystem Restoration sites.

9. Education

All workers for the project will be briefed on the environmentally sensitive nature of the project. The briefing will include specific instruction on the Central California Coast steelhead, the California red-legged frog and other protected species, with appropriate directions on avoiding impacts to all species, and on reporting any incidents, should they occur.

10. Monitoring

Monitoring the success of the new fish passage system and the progress of the creekside wetland and riparian ecosystem restoration project is an important element of the construction project. The City team will prepare yearly monitoring reports for five years over a ten-year period after the restoration project is completed. Monitoring reports will document the progress of the restoration towards the stated hydrologic, biogeochemical, plant community, and faunal support/ habitat project targets and standards. The faunal support/habitat section will include a yearly survey for the steelhead by an NMFS-approved biologist and a yearly survey for the California red-legged frog by a FWS-approved biologist.

F. NEPA ENVIRONMENTAL ASSESSMENT

The upstream portion of the project is being studied by the U.S. Army Corps of Engineers, under the Section 206 Continuing Authorities Program (CAP) for the environmental restoration of San Pedro Creek at the Capistrano Street Bridge site.

Upstream USACE 206 Program Restoration Project

The failed fish ladder at the Capistrano Bridge will be removed and replaced with a step-pool fish passage system. It will extend from the downstream sill of the bridge, and extend approximately 550 ft upstream of the Bridge and 1340 ft downstream of the bridge within the City's canal reserve. Additionally, the bridge will be reinforced to provide long-term structural integrity. These tasks are being accomplished with the U.S. Army Corps of Engineers as a partner with the City of Pacifica, under the Section 206 CAP environmental restoration authority. The 206 restoration project is expected to begin construction in spring 2004

Specifically, the 206 project will replace the temporary weir with a permanent structure that will both benefit the steelhead populations in the creek and protect the integrity of the adjacent houses. First, the bridge will be reinforced by injecting concrete at the base of the existing structure to shore up the bulk footings. Second, the existing concrete/fish ladder structure will be removed and then replaced with a custom-designed, natural-appearing, step-pool fish passage system to allow migration through the reach. Third, the existing slopes adjacent to the bridge will be regraded and reinforced where necessary with "dirty riprap" (riprap with soil) that will be planted with the native plant species (e.g., Arroyo willow [*Salix lasiolepis*], Red-stem dogwood [*Cornus sericea subsp. sericea*], etc.)

A secondary feature of the proposed project will be the additional restoration of the currently degraded riparian plant communities along approximately 1890 linear ft of the stream reach of the creek surrounding the bridge. Native plants typical of the central coast watersheds will be installed on both the north and south banks of San Pedro Creek at the fish passage site. Planting stock collected from the watershed for the restoration of Lower San Pedro Creek will be donated by the City for this planting effort.

Description of Construction Associated With the Plan to Restore Longitudinal Connectivity in San Pedro Creek at the Capistrano Bridge in the 206 Project

1. Operational Improvements to Capistrano Bridge

With respect to the structural stability of the Capistrano Street Bridge, the bridge will be primarily reinforced by burying the footings as a result of raising the bottom elevation of the stream channel. If necessary, additional reinforcement may be accomplished by injecting

concrete into the existing structure to shore up the bridge's bulk footings. Old concrete will be replaced or reinforced. Construction will be performed during low water intervals to limit the potential of fresh concrete coming into contact with creek waters.

2. Civil Construction to Prevent Further Entrenchment at the Capistrano Bridge

The overall streambed will be approximately graded to achieve an approximately 30 feet elevational difference over approximately 1930 feet. Grouted rock cut off walls will be spaced at 26 feet on the center, with an eight-inch elevation drop between walls (see Figure 4). Two to six ton rocks will be placed on either side of the streambed, and the spacing of the rocks will allow willows to grow quickly to provide shade over the stream. Plant community restoration will have the overall effect of increasing microtopographic roughness through slope rugosity, as well as increasing significantly vegetative roughness. Increase in roughness will slow water as it moves through the restoration reach.

In order to assure compliance with NEPA, this Initial Study has been jointly prepared as an Environmental Assessment (EA). The USACE has guidelines for implementing NEPA (US ACE, March 4, 1988). The guidelines state that no special format is required for an EA, but the EA should include:

- a brief discussion of the need for the proposed action,
- a discussion of alternative if there are unresolved conflicts concerning alternative uses of available resources,
- a discussion of environmental impacts of the action and alternatives, and
- a list of agencies, interested groups, and other persons consulted.

There are no unresolved conflicts concerning alternative uses of available resources. The temporary fish ladder must be replaced and the bridge must be reinforced. The City has been informed by the National Marine Fisheries Service that the fish ladder must be repaired to function properly. Early on in the planning stages, alternative designs for the fish passage were considered, but the proposed project was determined to be the best solution by all participants (City, USFWS, CDFG, USACE).

A discussion of the environmental impacts of the project are included in Section III and a list of persons and agencies consulted is contained in Section IV. B.

Mitigated Negative Declaration

DATE: May 5, 2003
SUBJECT: Mitigated Negative Declaration

Pursuant to the California State Public Resources Code and the California Environmental Quality Act (CEQA) Guidelines, as amended to date, the City of Pacifica (City) submits a Mitigated Negative Declaration for the Capistrano Bridge Fish Passage Project (Project).

PROJECT OVERVIEW

The City of Pacifica (City) is located along the Pacific Coast in northwest San Mateo County, three miles south of the City of San Francisco. The City is situated among three isolated valleys and open hillsides, as well as beaches and rocky bluffs. It is surrounded on three sides by the Santa Cruz Mountains and by the Pacific Ocean on the west.

San Pedro Creek is a perennial (year-round) steelhead stream in the southern portion of the City, with a 7.99 square mile watershed. San Pedro Creek is considered by many to be a unique biological resource in the greater San Francisco Bay region (Titus et al.1997), because it is one of only four Central California Coastal streams that still support a viable anadromous fishery. San Pedro Creek is, in fact, the only stream with a steelhead population along a 25-mile reach of coast between the Golden Gate Bridge and the City of Half Moon to the south (LCLA 2002). The fishery still exists within the watershed in large part because the cool springs in the headwaters of San Pedro Creek are protected within the Golden Gate National Recreation Area (GGNRA).

The project site is located along San Pedro Creek, in the middle Linda Mar residential district of the City (37° 34.030' N latitude and 122° 29.030' W longitude). The creek has a narrow riparian corridor in the area of the Capistrano Bridge as the back yards of houses line the creek on both sides both above and below the bridge.

This project is sponsored jointly by the City of Pacifica and the U.S. Army Corps of Engineers.

FINDINGS

The City, having reviewed the Initial Study for the proposed project, finds that:

1. The proposed project will:

   (1) Repair the Capistrano Avenue Bridge at San Pedro Creek, thereby restoring the integrity and stability of the structure,
   (2) Provide a permanent solution to allow for the passage of the federally protected steelhead throughout this reach of San Pedro Creek, and
   (3) Restore the stream/wetland ecosystem functions to San Pedro Creek in and adjacent to the Capistrano Avenue Bridge crossing of San Pedro Creek.

2. The project will not affect the following environmental effects as identified in the Initial Study Checklist as exceeding significance thresholds. All significant effects can either be avoided or reduced through the implementation of mitigation measures found in this document.

Air Quality:

IMPACT: The proposed upgrade of the Capistrano Street Bridge, removal of existing fish ladder and creek restoration will not generate permanent air pollutants or create air quality impacts. However, sensitive receptors could be exposed to air pollution emissions and high levels of dust during the construction phase of this project. Construction Best Management Practices (BMPs) as listed in the Bay Area Air Quality's CEQA Guidelines (1996) shall apply as mitigation measures:

Mitigation AQ-1: The following construction related Best Management Practices (BMPs) shall apply:

1) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
2) Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
3) Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph

Significance after Mitigation: Less than Significant Impact

Hydrology and Water Quality:

IMPACT: Direct effects from the construction of the bridge and fish passage system associated with the Capistrano Bridge Project could include (1) temporary degradation of habitat during the restoration of the stream reach and (2) temporary dewatering of that portion of the creek bed under construction for restoration, These effects, however, will be temporary and construction will be conducted during the low water months (July-August) and under consultation with the NMFS, the USFWS and the CDFG so as to avoid water quality and water availability impacts on steelhead and red-legged frogs.

Indirect effects could include (1) introduction of a small amount of sediment into the stream channel through the removal of existing vegetation and the construction of the dirty riprap, (2) temporary elevation of water temperature through the removal of existing riparian vegetation within the construction reach, and (3) temporary disruption of longitudinal connectivity within the restoration reach at the Capistrano Bridge. The first two indirect effects may persist for a short time beyond the construction interval. However, should they occur, it is not expected that either will persist beyond the first two growing seasons. Shortly after the nursery stock has established within the restoration site, fine root biomass produced in the upper soil profile will stabilize the newly planted slopes. Additionally, tree and shrub canopies will close and provide shade to the instream environment within the first two to five years.

Appropriate Best Management Practices (BMPs) as part of the Storm Water Pollution Prevention Plan (SWPPP) will be in place throughout the construction process to avoid and minimize any water quality degradation as a result of grading operation on the site. In addition to the use of BMPs, the City will perform water quality monitoring to make sure the BMPs are working properly to assure there is no discharge of pollutants from the site.

Mitigation HYD-1 Dewater Creek During Construction.

If water is present at the work site, a diversion structure (which can be made of various materials sheet piles, inflatable dams, sand bags, river run gravel, or other similar materials) shall be constructed, as needed, to isolate the work area and avoid or minimize downstream water quality impact. Stream water will be diverted around the work site in a pipe (pumped or gravity).

1) All water shall be discharged from the pipe back into the stream below the project site in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic).
2) Sumps or basins may also be used to collect water (if the creek has low flows during the construction phase).
3) In conjunction with the diversion structure, pumps or gravity-fed pipe systems may be used to de-water sites.
4) Because the creek supports an anadromous fishery, diversions shall maintain habitat connectivity and result in no changes in flow quality or quantity from pre-project conditions.
5) Bypassed flows can be slowly reintroduced into the dewatered area by leaving a silt barrier in place to allow water to slow and drop sediment to the extent possible.

Significance after Mitigation: Less than Significant Impact

Mitigation HYD-2 Avoid Erosion When Restoring Flows

All temporary diversion structures shall be removed within 48 hours of completion of work. Flows shall be restored in a manner that minimizes erosion.

1) When diversion structures are removed, to the extent practicable, the ponded flows will be directed into the low-flow channel within the work site to minimize downstream water quality impacts.
2) Flows shall gradually be restored to the channel to avoid a surge of water that would cause erosion or scouring.

Significance after Mitigation: Less than Significant Impact

Mitigation HYD-3 Erosion and Sediment Control Measures

Erosion control measures shall be used as appropriate to control sediment and minimize water quality impacts. Appropriate measures include, but are not limited to, the following:

1) Silt Fences
2) Straw Bale Barriers
3) Brush or Rock Filters
4) Erosion Control Blankets and Mats
5) Soil Stabilization i.e.: Tackified straw with seed, jute or geotextile blankets, etc.

Significance after Mitigation: Less than Significant Impact

Mitigation HYD-4 Handle Sediments So As to Minimize Water Quality Impacts

If sediment needs to be removed from San Pedro Creek, it shall be stored and transported in a manner that minimizes water quality impacts.

1) Wet sediments must be stockpiled within the dewatered portion of San Pedro Creek so water can drain or evaporate before removal. This measure applies to saturated, not damp, sediments.
2) Water draining from stockpiles will not be allowed to flow back into the creek. Silt fences shall be installed along the entire portion of the area downstream and down slope from any stockpile.

3) Streets shall be cleaned of mud and/or dirt by street sweeping, as necessary, and not by hosing down the street.

Significance after Mitigation: Less than Significant Impact

3. A Mitigated Negative Declaration will be filed as the appropriate CEQA document of the Project.

BASIS OF FINDINGS

Based on the environmental evaluation presented herein, the Project will not cause significant adverse effects related to aesthetics, agricultural resources, cultural resources, geology/soils, hazards and hazardous materials, land use/planning, mineral resources, population/housing, public services, recreation, transportation/traffic, and utilities/service systems. In addition, substantial adverse effects on humans, either direct or indirect, will not occur. The Project does not affect any important examples of the major periods of California prehistory or history. Nor will the Project 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.

Since the project does not involve a direct change in the physical environment, the potential environmental effects of the project are limited to: aesthetics, biology, geology, hydrology, land use, and recreation. Based on the Initial Study, the mitigation measures avoid, minimize, and reduce impacts to these environmental effects to less than significant levels.

Attached is the Initial Study prepared for the Project. The public can review documents used in preparation of the Initial Study at the City of Pacifica, Department of Public Works, 170 Santa Maria Avenue, Pacifica, California 94044, Attn: Scott Holmes, Director.

FIGURE II-3 - LOCATION OF WORK AREAS

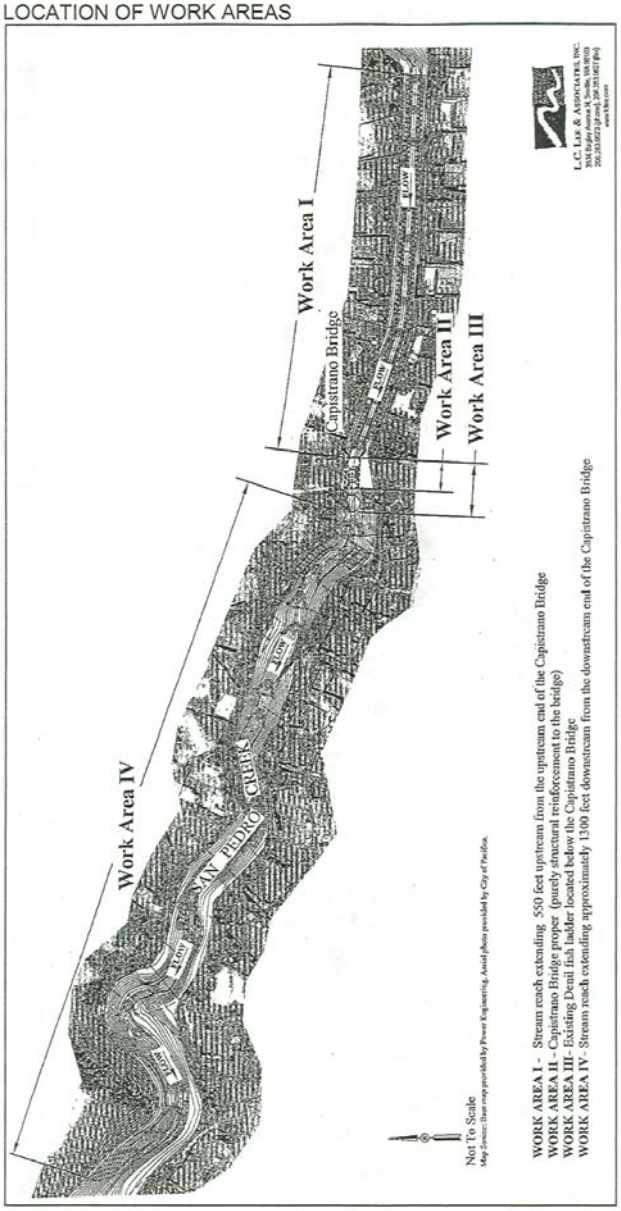


FIGURE II-4 - GRADING PLAN DETAILS

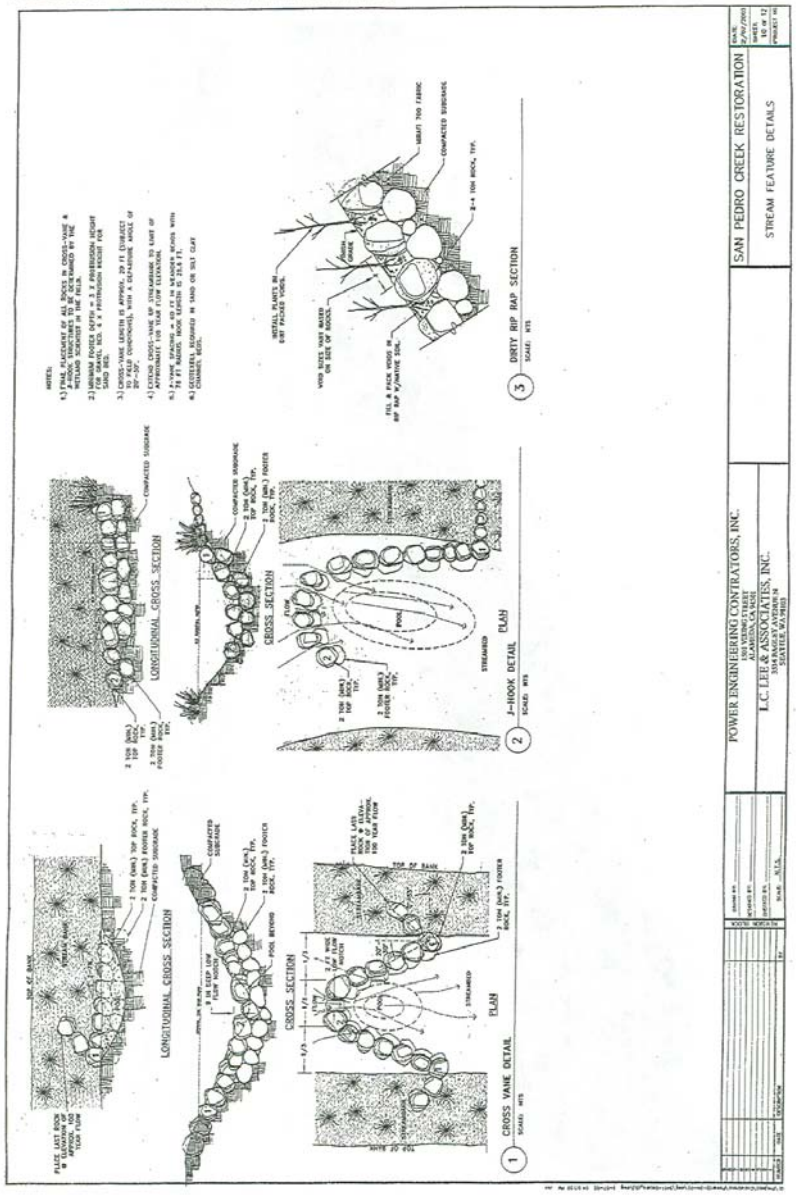
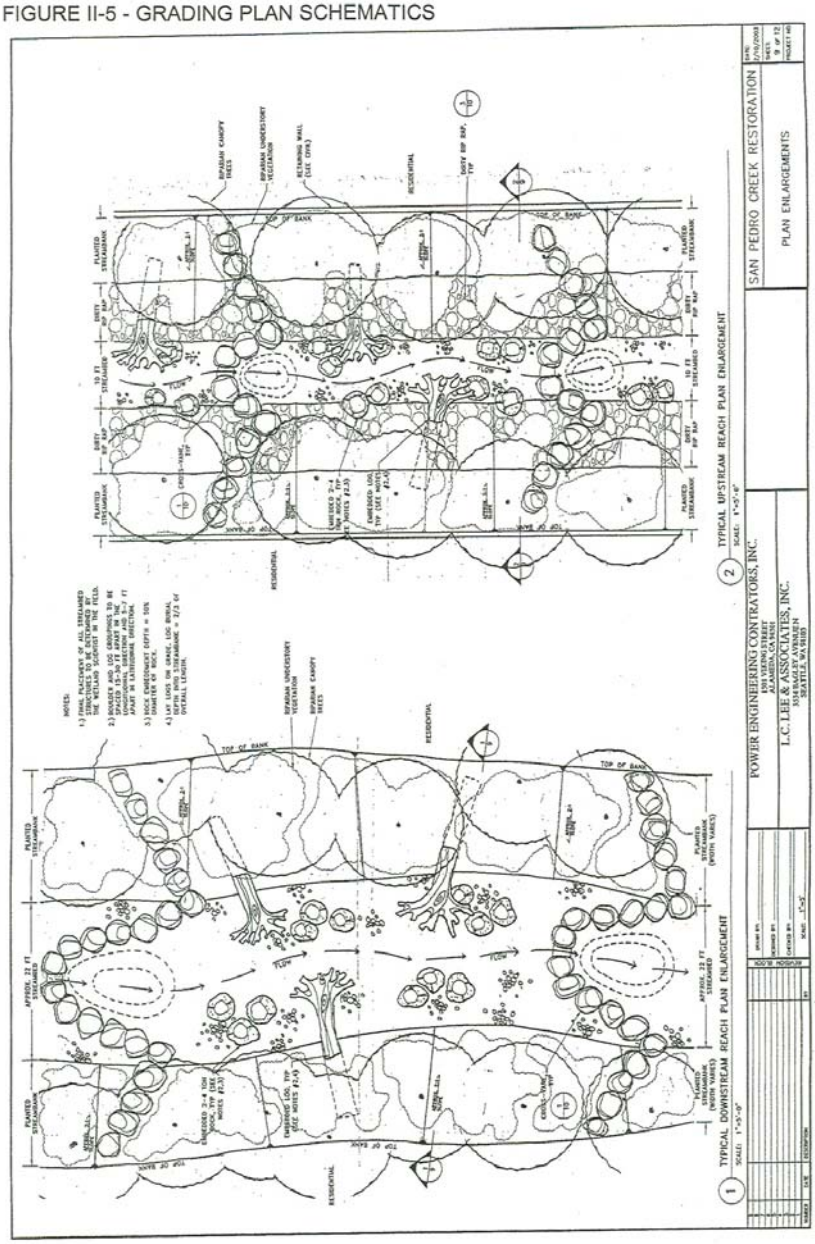


FIGURE II-5 - GRADING PLAN SCHEMATICS



III. Environmental Checklist Form

III. ENVIRONMENTAL CHECKLIST FORM

A. Project Information

1. **Project Title:** Capistrano Bridge Fish Passage Project

2. **Lead Agency Name and Address:** City of Pacifica, 170 Santa Maria Avenue, Pacifica, CA 94044

3. **Contact Person and Phone Number:** Scott Holmes, Director of Public Works. Phone: 650-738-4660, Fax: 650-355-7256

4. **Project Location:** Along San Pedro Creek, in the middle Linda Mar residential district of the City. Restoration activities will start approximately 1,300 ft downstream of the 60 ft wide Capistrano Street Bridge and continue approximately 550 ft upstream of the bridge.

5. **Project Sponsor's Name and Address:** City of Pacifica, 170 Santa Maria Avenue, Pacifica, CA 94044

6. **General Plan Designation:** N/A

7. **Zoning:** N/A

8. **Description of the Project:** See above under Chapter II, Section C.

9. **Surrounding Land Uses and Setting:** San Pedro Creek in the area of the Capistrano Bridge is surrounded by existing homes. The back yards of these homes back up to the narrow riparian corridor on both sides of the creek above and below the creek.

10. **Other public agencies whose approval is required:** The project would require approval and/or permitting from the following agencies; 1) City of Pacifica, 2) U.S. National Marine Fisheries Service, 3) U.S. Fish and Wildlife Service, 4) California Department of Fish and Game, and the 5) the U.S. Army Corps of Engineers.

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 /Soils**
☐ **Hazards & Hazardous Materials**	■ **Hydrology / Water Quality**	☐ **Land Use / Planning**
☐ **Mineral Resources**	☐ **Noise**	☐ **Population / Housing**
☐ **Public Services**	☐ **Recreation**	☐ **Transportation/Traffic**
☐ **Utilities / Service Systems**	■ **Mandatory Findings of Significance**	

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier 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.

Scott Hb — Director of PW 4-20-04

Signature Date

Signature Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

3) Once the lead agency has determined that a particular physical impact may occur, then

the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

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

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

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

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	■	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	■	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	■	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	■
c) 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
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	■
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	■
c) 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 ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	■
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	■	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	■	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	■	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	■	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	■	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	■	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	■	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in □15064.5?	☐	☐	☐	■
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to □15064.5?	☐	☐	☐	■
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	■
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	■
1) 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.	☐	☐	☐	■
2) Strong seismic ground shaking?	☐	☐	■	☐
3) Seismic-related ground failure, including liquefaction?	☐	☐	☐	■
4) Landslides?	☐	☐	☐	■
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	■	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	■	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	■
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	■
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	■
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	■
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?	☐	☐	☐	■
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?	☐	☐	☐	■
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	■	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	■
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	■
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	■
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	■
f) Otherwise substantially degrade water quality?	☐	☐	■	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	■
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	■
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	■	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?	☐	☐	☐	■
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	■	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XI. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	■	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	■
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	■
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	■	☐
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?	☐	☐	☐	■
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?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	■
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES --				
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:				
1) Fire protection?	☐	☐	☐	■
2) Police protection?	☐	☐	☐	■
3) Schools?	☐	☐	☐	■
4) Parks?	☐	☐	☐	■
5) Other public facilities?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. RECREATION --				
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?	☐	☐	☐	■
b) Does the project include recreational facilities or require the construction or expansion of 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
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) 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)?	☐	☐	☐	■
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	■
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	■
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	■
e) Result in inadequate emergency access?	☐	☐	☐	■
f) Result in inadequate parking capacity?	☐	☐	☐	■
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	■
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	■
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	■
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	■
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	■
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	■
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	■

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
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?	☐	■	☐	☐
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)?	☐	☐	☐	■
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	■	☐	☐

IV. Responses to Initial Study Checklist

This Response to the Initial Study Checklist is the standard format used to examine the full range of potential environmental effects, and is the basis used to determine the elements of the Negative Declaration. The format of these responses is based upon the 1999 California Environmental Quality Act (CEQA) Guidelines.

1. Aesthetics

Environmental Setting

The project site is located along San Pedro Creek, in the middle of the Linda Mar residential district of the City (see Figure 2). The creek has a narrow riparian corridor in the area of the Capistrano Bridge as the back yards of houses line the creek on both sides both above and below the bridge.

Will the proposed project:

a. Have a substantial adverse effect on a scenic vista? *(Source #: 11)*

Less than Significant Impact. The creek is steeply incised and the existing residences are at the top of the creek bank. Thus most of the creek bank and creek bed cannot be seen from any vantage point, except at the Capistrano Street Bridge itself. The proposed project will remove unsightly urban trash and the restoration will improve the visual appearance of the creek from the Bridge vantage point.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? *(Source #s: 9, 11)*

c. Substantially degrade the existing visual character or quality of the site and its surroundings? *(Source #: 9)*

Less than Significant Impact. Ground disturbance activities such as grading or construction are associated with the project. However, these ground disturbing activities will be 1) at the bottom of the creek channel thus will not be visible to all surrounding sensitive receptors, and 2) these activities are construction-related and thus are temporary.

No trees or rock outcroppings will be removed as part of the project. The project is not located near or adjacent to a state scenic highway.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? *(Source #: 13)*

No Impact. The project would not require the construction of lighting. Therefore, there are no lighting impacts resulting from this project. Nighttime views in the project area would not be affected by the project.

2. Agriculture Resources

Environmental Setting

The City of Pacifica is primarily an urban community and the land surrounding the project parcel is primarily residential in character. The Pacifica General Plan does not identify any farmlands of statewide significance near the project site, thus no agricultural resource will be impacted by the project.

Will the proposed project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? *(Source #: 9)*

No Impact. The project site is in the Linda Mar District of Pacifica and is designated for residential land uses in the City's General Plan Land Use Element and Zoning Ordinance. The project site does not comprise farmland nor is it located adjacent to farmland. The proposed project would not directly remove any acreage from agricultural production. There will be no impacts to farmland resources as a result of the proposed Capistrano Bridge upgrade and San Pedro Creek Fish Ladder and Stream Restoration.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract? *(Source #s: 9,10)*

No Impact. The project site is located within a residential area and it will not conflict with nor affect any land that has been zoned for agricultural use or is currently under Williamson Act contracts.

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? *(Source #s: 9,13)*

No Impact. The project will not involve other changes in the existing environment which could result in the conversion of farmland to non-agricultural use.

3. Air Quality

Environmental Setting

The Bay Area Air Quality Management District (BAAQMD) regulates air quality in Pacifica. The BAAQMD monitors and enforces District, State of California and Federal air quality standards. There are no major stationary air pollutant sources or major sources of odors adjacent to this site in Pacifica. Automobile use is the primary source of air pollutant emissions in the community.

The Bay Area is in attainment for all national pollutant standards set forth in the federal Clean Air Act with the exception of ozone. In 1998, the US EPA designated the Bay Area as "non-attainment" for the national 1-hour ozone standard. The ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The region also

periodically exceeds State ambient air quality standards for ozone and fine particulate matter less than10 microns in diameter (PM_{10}). The state standards for these pollutants are more stringent than the national standards. All other pollutants are designated as "attainment" or "unclassified" for federal standards and as an "attainment" area for the state standard.

Exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights (for particulate matter) or hot, sunny summer afternoons (for ozone).

Will the proposed project:

a. **Conflict with or obstruct implementation of the applicable air quality plan?** *(Source #s: 1, 2, 3,4)*

No Impact. The proposed repair of the Capistrano Street Bridge, removal of existing fish ladder, construction of new step-pools in the San Pedro Creek channel and habitat restoration will not add a substantive amount of air pollutants into the air basin. Therefore, the project does not conflict with or obstruct the implementation of the Bay Area air quality management plan.

b. **Violate any air quality standard or contribute substantially to an existing or projected air quality violation?** *(Source #s: 1, 2, 3,4)*

No Impact. The project does involve temporary construction activities with heavy equipment that could result in direct air pollutant emissions. However, these uses are temporary and are thus not substantive.

c. **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 ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?** *(Source #s: 1, 2, 3, 4)*

No Impact. The project does not involve new land uses or long-term construction activities with heavy equipment that would result in direct air pollutant emissions. The project does not contribute to urban growth or introduce new sources of air emissions into the air basin.

d. **Expose sensitive receptors to substantial pollutant concentrations?** *(Source #s: 1, 2, 3,4)*

Less than Significant Impact with Mitigation Incorporation. The proposed upgrade of the Capistrano Street Bridge, removal of existing fish ladder and creek restoration will not generate permanent air pollutants or create air quality impacts. However, sensitive receptors could be exposed to air pollution emissions and high levels of dust during the construction phase of this project. Construction Best Management Practices (BMPs) as listed in the Bay Area Air Quality's CEQA Guidelines (1996) shall apply as mitigation measures:

Mitigation AQ-1: The following construction related Best Management Practices (BMPs) shall apply:

1. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
2. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

3. Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.

Effectiveness:	Would reduce or eliminate creation of fugitive dust.
Implementation:	City of Pacifica
Feasibility:	Fugitive dust from the project can easily be avoided or reduced.
Timing:	Project Implementation.
Monitoring:	City of Pacifica, Department of Public Works

e. Create objectionable odors affecting a substantial number of people? *(Source #s: 11,13)*

Less than Significant Impact. Construction of the project would not use materials that could create objectionable odors. The ripping of the creek bed may temporarily unearth anerobic soil conditions, possibly creating some "earthy" odors, but this condition would only last a few days.

4. Biological Resources

Environmental Setting

Presence of Federal Listed Species

A search of the California Natural Diversity Data Base (CNDDB) was made to determine the potential for the project to impact sensitive animal and plant species. The CNDDB report provides information on documented occurrences of state and federally listed species known from the San Francisco South USGS quadrangle, which includes the project area within the City of Pacifica. Animal species on the list, with their status, are:

San Francisco garter snake (Thamnophis sirtalis tetrataenia), Federal and State Endangered
San Bruno elfin butterfly (Incisalia mossii bayensis), Federal Endangered
Mission blue butterfly (Icaricia icarioides missionensis), Federal Endangered
California clapper rail (Rallus longirostris obsoletus), Federal and State Endangered
Western snowy plover (Charadrius alexandrinus nivosus), Federal Threatened
Red-legged frog (Rana aurora draytonii), Federal Threatened
Steelhead (Oncorhynchus mykiss)

1. The San Francisco garter snake (SFGS) was historically known in Pacifica from Calera Creek and its environs. It is still known to occur in the Laguna Salada/Mori Point Area of this City. There are no recent or historic SFGS sightings in the San Pedro Creek area of Pacifica. No ponds which could provide habitat are located in the vicinity of the proposed project.

2. Habitat for the two listed butterfly species must contain their larval food plants. No portions of the project area support the lupine species used by the Mission blue butterfly or the stonecrop used by the San Bruno elfin butterfly.

3. The clapper rail requires coastal salt marshes which are not present in the project area.

4. The snowy plover is known to forage along the sandy beach shore of Pacifica State Beach, but the upstream portion of San Pedro Creek does not contain suitable foraging or nesting habitat for the plover.

5. No California Red-Legged Frogs (CRLFs) have been recorded in the project area; however, a viable population is known to exist at the San Pedro Creek Flood Control and Wetland Ecosystem Restoration Project site and the nearby Shamrock Ranch near the mouth of the creek. Thus, it should be assumed that the project is within the dispersal capabilities of the red-legged frog, and that the project site may be used for dispersal, foraging and breeding by this federally threatened frog.

6. The Central California Coast Steelhead is known to occur and spawn in the San Pedro Creek watershed. San Pedro Creek supports the most viable steelhead population in San Mateo County and its spawning habitat is in excellent condition. In its upper reaches, San Pedro creek provides productive habitat for the steelhead to spawn and grow as well as representing the only steelhead run in San Mateo County. In addition, three distinct age classes are present in this creek, indicating year-round juvenile usage of San Pedro Creek (NMFS 1999).

a) Natural Conditions of Central California Coast Steelhead

There are two forms of the coastal rainbow trout (Onchorynchus mykiss) (LCLA 2002). One form, rainbow trout, permanently resides in freshwater streams, while the other, steelhead, is anadromous. Populations of this species may be completely anadromous, resident, or an interbreeding population of both forms. Steelheads spend one to four years in the ocean.

Steelhead mature either in the winter or the summer; however, a large degree of overlap exists in the spawn timing. Winter-run steelheads mature in the ocean, and enter fresh water with well-developed gonads, spawning soon after arriving in a freshwater environment. In contrast, summer-run steelheads mature in freshwater streams for several months before they can spawn within the stream (Barnhart 1986). Steelhead also are capable of spawning more than once before dying, with steelhead in Oregon and California having higher frequency of two spawning migrations than their counterparts north of Oregon (NMFS 1999).

The Central California Coast steelhead Evolutionary Significant Unit (ESU), of which the San Pedro Creek qualifies, occupies river basins from the Russian River to Soquel Creek. This ESU includes the San Francisco Bay and San Pablo Bay drainages. Only winter-run steelheads are found in the Central California Coast ESU (NMFS 1999).

b) Threats to Steelhead Runs

Steelhead populations located on the central and southern California coast have been highly impacted by habitat degradation and destruction (Titus et al. 1997). Along the central and southern coast of California, six of nine main steelhead populations south of San Francisco Bay were rated as having a high risk of extinction by Nehlson et al. (1991). To date, at least 11 other populations already are extinct. As human demand for fresh water has increased in California, dams, water diversions, and groundwater pumping have affected significantly the availability of water for steelhead and other aquatic species in almost every major stream or river south of San Francisco.

Specifically, the Central California Coast Steelhead ESU is threatened as population numbers have drastically decreased across its range. In the 1960s, approximately 94,000 steelhead adults were thought to have spawned within this ESU, with 50,000 fish in the Russian River and 19,000 fish in the San Lorenzo River. Recent surveys indicate a drop of 85% of relative abundance in these rivers, with only 7,000 fish (including hatchery fish) in the Russian River and approximately 500 fish in San Lorenzo River. In the tributaries of San Francisco and San Pablo Bays, steelhead populations have been nearly extirpated. Marin County tributaries apparently support fair to good size runs of steelhead (NMFS 1999).

Will the proposed project:

4. **a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?** *(Source #s: 6, 11,12,13)*

Less than Significant Impact. There are seven species of special concern that are known to occur in the project vicinity, however suitable habitat exists for only two of the species, both of which are known to occur in the creek: the California Red-legged Frog and Central Coast Steelhead. Direct impacts to steelhead and red-legged frogs from the construction of the bridge and fish passage system associated with the Capistrano Bridge Project may occur, but the conservation measures already incorporated into the project, which are listed below, would reduce impacts to less than significant levels.

1. Direct and Indirect Effects

As stated above, direct impacts to steelhead and red-legged frogs from the construction of the bridge and fish passage system associated with the Capistrano Bridge Project will include the (1) temporary degradation of habitat during the restoration of the stream reach, (2) temporary dewatering of that portion of the creek bed under construction for restoration, and (3) replacement of the antiquated fish ladder with a custom-designed step-pool complex that will remove the primary barrier to fish movement (up- and downstream) within the main stem of San Pedro Creek. The first two effects, however, will be limited to the time of construction, i.e., during the low water interval (July-August) established by NMFS and CDFG, while the second is considered to be a long-term beneficial effect.

To prevent an accidental taking of the red-legged frog, a field survey for this species will be conducted using FWS methods by a FWS-approved biologist. Any individuals found will be re-located to a FWS-approved site within San Pedro Creek drainage (e.g. Shamrock Ranch). Perimeter fencing also will be installed before any grading occurs on the site.

Indirect impacts may include the (1) introduction of a small amount of sediment into the stream channel through the removal of existing vegetation and the construction of the dirty riprap, (2) temporary elevation of water temperature through the removal of existing riparian vegetation within the construction reach, and (3) temporary disruption of longitudinal connectivity within the restoration reach at the Capistrano Bridge. The first two indirect effects may persist for a short time beyond the construction interval. However, should they occur, it is not expected that either will persist beyond the first two growing seasons. Shortly after the plant nursery stock has established within the restoration site, fine root biomass produced in the upper soil profile will stabilize the newly planted slopes. Additionally, tree and shrub canopies will close and provide shade to the instream environment within the first two to five years.

The construction may also disrupt the longitudinal connectivity for the red-legged frog, potentially preventing it from moving between upstream and downstream habitat. This disruption may limit the species' ability to forage and seek shelter. Therefore, until the ecosystem functioning of the restoration area is comparable to that of the original habitat, there will be a decrease in available foraging and breeding habitat for this threatened species. It is anticipated, however, that the decrease in habitat will not affect greatly the California red-legged frog as no individuals have ever been observed at this site, and no individuals were recorded during the frog sweep for the San Pedro Creek Wetland Ecosystem Restoration and Flood Control Project in 2000. No CRLFs have been recorded in San Pedro Creek since the 1994

sighting at the mouth of the creek.

2. Interdependent and Interrelated Effects

Beneficial interrelated effects on local populations of Central California coast steelhead and on the CRLF may occur primarily due to the combined effects of the waters/wetlands ecosystem restoration of the downstream reach of San Pedro Creek, and the fish passage complex that is the subject of this Biological Assessment. As discussed in the Project Descript Pacifica, in cooperation with the Corps, currently is completing the restoration of approximately nine acres of flood plain associated with lower San Pedro Creek. The purpose of this cooperative Pacifica - Corps project is to provide flood protection for the Linda Mar residential/commercial district by restoring the flood plain ecosystem. Grading in Phase II of the eastern portion of the waters/wetlands restoration of lower San Pedro Creek (i.e., east of Highway One) was completed in fall 2002. Installation of the nursery stock is scheduled for spring 2003. Grading and installation of nursery stock in Phase II of the western portion of the waters/wetlands restoration of lower San Pedro Creek (i.e., west of Highway One) will commence during summer 2004.

3. Cumulative Effects of Actions Likely to Occur

The Capistrano Bridge Fish Passage Project will have different short-term and long-term cumulative effects to central California coast steelhead that currently reside in the project site in San Pedro Creek. In the short-term (i.e., approximately 2 months during the time of construction), there will be a decrease in habitat for the steelhead. In the long-term (i.e., after completion of the restoration), it is expected that the project will have a beneficial effect on the central California coast steelhead. The creation of a step-pool fish passage system will remove a barrier for upstream adult steelhead migration to spawning gravels, for downstream migration of adults, and juvenile movement through the reach. Additionally, the incorporation of several project standards (e.g., increased functioning of native plant species, increased habitat structure) will lead to the restoration of the banks and side slopes with a higher level of ecosystem functioning than exists within the currently degraded plant community.

The Capistrano Bridge Fish Passage Project will have different short-term and long-term cumulative effects to the California red-legged frog. Although this species has not been sighted here since 1994, this project site is assumed to be within the dispersal capabilities of the red-legged frog. In the short-term (i.e., approximately 2 months during the time of construction), there will be a decrease in habitat for the California red-legged frog. In the long-term (i.e., after completion of the restoration), it is LCLA's best professional judgment that the project will have a beneficial effect on the California red-legged frog. Several specific waters/wetlands ecosystem project standards (e.g., increased functioning of native plant species, increased habitat structure) are incorporated so as to assess whether the restoration of the banks and side slopes will result in a higher level of ecosystem functioning than exists within the currently degraded plant community over the monitoring period.

Conservation Measures Incorporated Into The Project

The City of Pacifica design team has worked to avoid and minimize for the potential impacts of the proposed project to the central California coast steelhead described in Part IV Section A "Direct and Indirect Effects" of this Biological Assessment. Conservation measures proposed to protect the central California coast steelhead during this project are described below.

1. Construction Timing

Demolition of the existing fish ladder and its replacement by a fish passage system will

necessitate bypassing the creek throughout the length of the project. Thus a temporary creek by-pass will be constructed starting at the upstream extent of the project, continuing to the downstream terminus. All construction will take place during the low water period specified by NMFS and CDFG; the project currently is schedule for construction in July through August 2003. Construction during the dry season will serve to limit erosion and subsequent sedimentation downstream of the construction reach.

2. San Pedro Creek By-Pass Construction and Maintenance

Because it is possible that juveniles and adult steelhead may become entrained in the by-pass culvert, a clear zone of intake to the pipe will be delineated, and a sump pump installed with a barrier to prevent intake of fish into the by pass system. A similar sump pump/pipe/screen barrier will be installed at the downstream end of the reach, but in a reverse order. Prior to installation of the creek by-pass, the creek will be swept for fish and then blocked off to prevent movement into the construction reach. The creek will be surveyed every day prior to construction to remove any fish that might attempt to utilize this reach of creek.

Additionally, the City will establish a contingency plan for fish entrainment that is directed by the consulting wetland ecologist and fish biologist. In the event of a rare summer storm, a protocol for emergency response will be in place to ensure that storm water does not overwhelm the by-pass system.

3. Step-Pool Complex

The overall goal of the project is to remove a barrier to fish passage within San Pedro Creek. As such, the project is one that specifically addresses limits to the viability of an endangered fish run and therefore, the project itself represents a long-term conservation measure.

4. Exclusion of Reptiles and Amphibians from Work Area

Perimeter fencing will be installed before any grading occurs on the site. The fencing will be designed to U.S. Fish and Wildlife Service specifications to preclude all reptiles and amphibians from entering the work area. The exclusion of these animals from the work area should eliminate direct mortality that may result from construction activities. In addition, prior to construction, the LCLA/City team, along with a qualified (i.e. FWS-approved) biologist will sweep the construction area to remove and relocate individual reptiles and amphibians to a FWS-approved receptor site.

5. Exclusion of Steelhead from the Construction Zone

As described above, steelhead will be excluded from the work area prior to construction. Prior to daily construction, a FWS/NMFS -approved biologist will survey the reach of creek under construction and remove any fish that may have entered the reach during the off-hours.

6. Riparian Restoration Design

The restoration design for the creek banks and adjacent riparian zone includes the planting of native species that will provide, within two growing seasons, significantly more shade over the reach where the fish passage system will be installed. This will serve to lower or maintain cool water temperatures that are in part, a consequence of the cool base flow in San Pedro Creek.

7. Sediment and Erosion Control

Appropriate best management practices will be in place throughout the construction process to avoid and minimize any water quality degradation as a result of grading operation on the site. In addition, water quality monitoring will occur to help the City target problem areas on the site that require additional best management practices to avoid the discharge of poor quality stormwater to jurisdictional waters/wetlands.

A Storm water Pollution Prevention Plan (SWPPP) for the project is in preparation. It will provide best management practices for minimizing sediment generation and transport during construction.

8. Bullfrog Control

It has been demonstrated that the bullfrog (Rana catesbeiana) populations have an adverse effect on the California red-legged frog (USFWS 2000). Currently, there have been no reports of bullfrogs at the project site, although given the large size of the watershed; they may exist within the drainage. The City has agreed to control bullfrogs to the extent possible throughout the City's waters/wetlands ecosystem restoration sites, including the San Pedro Creek Waters/Wetlands Ecosystem Restoration and Flood Control and the Calera Creek Wetland and Riparian Ecosystem Restoration sites.

9. Education

All workers for the project will be briefed on the environmentally sensitive nature of the project. The briefing will include specific instruction on the central California coast steelhead, the California red-legged frog and other protected species, with appropriate directions on avoiding impacts to all species, and on reporting any incidents, should they occur.

10. Monitoring

Monitoring the success of the new fish passage system and the progress of the creekside wetland and riparian ecosystem restoration project is an important element of the construction project. The City team will prepare yearly monitoring reports for five years over a ten-year period after the restoration project is completed. Monitoring reports will document the progress of the restoration towards the stated hydrologic, biogeochemical, plant community, and faunal support/ habitat project targets and standards. The faunal support/habitat section will include a yearly survey for the steelhead by an NMFS-approved biologist and a yearly survey for the CRLF by a FWS-approved biologist.

4. **b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?** *(Source #'s: 6, 9,11,12,13)*

Less than Significant Impact. See Section 4a, above.

4. **c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?** *(Source #: 11)*

Less than Significant Impact. See Section 4a, above.

d. **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?** *(Source #s: 6,11,12,13)*

Less than Significant Impact. See Section 4a, above.

e. **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?** *(Source #s: 9, 10, 11)*

Less than Significant Impact. See Section 4a, above.

f. **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?** *(Source #s: 9, 12)*

No impact. The project site is not contained within an area covered by a Habitat Conservation Plan, a Natural Community Conservation Plan, or any other approved local, regional, or state habitat conservation plans.

5. Cultural Resources

Environmental Setting

The Pacifica General Plan Historic Preservation Element identifies a list of historic resources in the City of Pacifica. Two mapped resources occur near the project site. These include Sanchez Adobe and St. Peter's Church. No historic resources occur within the immediate project site.

Will the proposed project:

a. **Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?** *(Source #s: 9,12)*

No Impact. The project is located within San Pedro Creek which has been subject to continued disturbance from water flowing in the creek and is unlikely to contain any historic or cultural resources. In addition, cultural and historic resource studies conducted for the San Pedro Creek Flood Control project found two cultural resource sites in areas near the coastline and not in the creek.

b. **Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?** (Source #: 9)

No Impact. See 5a, above.

c. **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?** (Source #s: 9,11)

No Impact. See 5a, above.

d. Disturb any human remains, including those interred outside of formal cemeteries? *(Source #: 9)*

No Impact. See 5a, above.

6. Geology And Soils

Will the proposed project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

1. 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? (Sources #s: 9, 14)

No Impact: The Capistrano Street Bridge is not located within the rupture zone (Alquist-Priolo Zone) of a known fault. The closest known fault is the San Andreas Fault which is located roughly one mile (USGS Montara Mountain Quadrangle, 1993) away from the project site. Because the site is outside of the Alquist-Priolo Zone, the potential for ground surface rupture due to faulting is considered to be low. Therefore, no impact to the area from fault rupture is expected.

2. Strong seismic ground shaking? (Source #s: 9, 13,14)

Less than Significant Impact. The project site is located in San Mateo County within a seismically active area. The San Andreas Fault is located roughly one mile to the east of the site, resulting in the high probability that the project site will be subject to very strong seismic shaking during the next major earthquake on the San Andreas Fault. However, the proposed project does not involve building habitable structures or site improvements that could result in the injury or death of persons due to seismic shaking. Thus, the potential of increased impact of strong seismic ground shaking from upgrading the Capistrano Street Bridge and restoring San Pedro Creek is not considered significant.

3. Seismic-related ground failure, including liquefaction? (Source #: 13)

No Impact. No habitable structures are proposed as part of project. Therefore, no structural damage or injury resulting from structural damage due to seismic related ground failure is expected from the project.

4. Landslides? (Source #s: 9, 13)

No Impact. There is an existing landslide located just down stream of the Capistrano Bridge on north bank of San Pedro Creek. Although the slide would not be directly affected by the fish ladder project, it would be stabilized as part of the creek restoration/enhancement portion of the project. Therefore, the proposed project would result in a beneficial effect to this existing landslide.

b. Result in substantial soil erosion or the loss of topsoil? *(Source #s: 11,13)*

Less than Significant Impact. Indirect impacts of the project may include (1) the introduction of a small amount of sediment into the stream channel through the removal of existing vegetation and the construction of the riprap, (2) temporary elevation of water

temperature through the removal of existing riparian vegetation within the construction reach, and (3) temporary disruption of longitudinal connectivity within the restoration reach at the Capistrano Bridge. Should these impacts occur, it is not expected that either will persist beyond the first two growing seasons. Shortly after the nursery stock has established within the restoration site, fine root biomass produced in the upper soil profile will stabilize the newly planted slopes. Additionally, tree and shrub canopies will close and provide shade to the in stream environment within the first two to five years.

In addition, appropriate best management practices will be in place throughout the construction process to avoid and minimize erosion potential and water quality degradation as a result of grading operations on the site. These measures are listed in Section 8, Hydrology, below.

c. **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?** *(Source #: 9)*

Less than Significant Impact. See answer to 6c, above.

d. **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?** *(Source #: 9)*

Less than Significant Impact. See answer to 6c, above.

e. **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?** *(Source #: 13)*

No Impact. The proposed project does not involve the use of septic tanks or generate a need for wastewater disposal.

7. Hazards And Hazardous Materials

Environmental Setting

Hazardous substances have certain chemical and physical properties that may pose a substantial present or future hazard to human health or the environment when improperly handled, stored, disposed or otherwise managed. These substances are commonly used in commercial, agricultural, and industrial applications, and to a limited extent in residential areas. There are no known hazardous material sites identified in the City of Pacifica based on a review of the Cortese List (pursuant to Government Code Section 65962.5).

Will the proposed project:

a. **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?** *(Source #: 13)*

No Impact. The proposed Capistrano Bridge and restoration project does not involve the transport, use, or disposal of hazardous materials.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? *(Source #: 13)*

No Impact. The proposed Capistrano Bridge and restoration project does not involve the transport, use, or disposal of hazardous materials and does not pose a hazard to the public from upset conditions.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or hazardous waste within one-quarter mile of an existing or proposed school? *(Source #: 13)*

No Impact. The proposed Capistrano Bridge and restoration project does not involve the handling of hazardous materials or cause the emission of hazardous substances.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? *(Source #: 5)*

No Impact. The California Department of Toxic Substances Control maintains a Hazardous Waste and Substances Site List (Cortese List). The project site is not located on or adjacent to a site known to be on a list of sites containing hazardous materials pursuant to Government Code Section 65962.5.

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? *(Source #s: 7, 9)*

No Impact. The project site is located in the Linda Mar neighborhood of Pacifica. The nearest airport is San Francisco International, approximately 3.5 miles to the east of the project site. The project site is not within the land use plan area of this airport. The proposed Capistrano Bridge and restoration project would not result in an airport safety hazard.

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? *(Source #: 7)*

No Impact. The nearest private airport to the project site is located at Half Moon Bay roughly 6 miles south of the project site. Because of this distance, this airstrip does not present a project related safety hazard.

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? *(Source #s: 7, 8, 9)*

No Impact. Upgrading the bridge and restoring the creek would not impair or physically interfere with any emergency response or emergency evacuation. The improved Capistrano Street Bridge could be used in an emergency response and/or emergency evacuation plan within the Linda Mar neighborhood.

h. Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands? *(Source #: 8)*

No Impact. The Capistrano Street Bridge is not located adjacent to a wild land area and the proposed bridge construction and creek restoration project would not present a significant source of possible ignition to a wild land fire.

8. Hydrology And Water Quality

Will the proposed project:

a. Violate any water quality standards or waste discharge requirements? *(Source #: 11, 13)*

Less than Significant Impact With Mitigation Incorporation. Direct effects from the construction of the bridge and fish passage system associated with the Capistrano Bridge Project could include (1) temporary degradation of habitat during the restoration of the stream reach and (2) temporary dewatering of that portion of the creek bed under construction for restoration, These effects, however, will be temporary and construction will be conducted during the low water months (July-August) and under consultation with the NMFS, the USFWS and the CDFG so as to avoid water quality and water availability impacts on steelhead and red-legged frogs.

Indirect effects could include (1) introduction of a small amount of sediment into the stream channel through the removal of existing vegetation and the construction of the dirty riprap, (2) temporary elevation of water temperature through the removal of existing riparian vegetation within the construction reach, and (3) temporary disruption of longitudinal connectivity within the restoration reach at the Capistrano Bridge. The first two indirect effects may persist for a short time beyond the construction interval. However, should they occur, it is not expected that either will persist beyond the first two growing seasons. Shortly after the nursery stock has established within the restoration site, fine root biomass produced in the upper soil profile will stabilize the newly planted slopes. Additionally, tree and shrub canopies will close and provide shade to the instream environment within the first two to five years.

Appropriate Best Management Practices (BMPs) as part of the Storm Water Pollution Prevention Plan (SWPPP) will be in place throughout the construction process to avoid and minimize any water quality degradation as a result of grading operation on the site. In addition to the use of BMPs, the City will perform water quality monitoring to make sure the BMPs are working properly to assure there is no discharge of pollutants from the site.

Mitigation HYD-1 Dewater Creek During Construction.

If water is present at the work site, a diversion structure (which can be made of various materials sheet piles, inflatable dams, sand bags, river run gravel, or other similar materials) shall be constructed, as needed, to isolate the work area and avoid or minimize downstream water quality impact. Stream water will be diverted around the work site in a pipe (pumped or gravity).

1. All water shall be discharged from the pipe back into the stream below the project site in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic).
2. Sumps or basins may also be used to collect water (if the creek has low flows during the construction phase).

3. In conjunction with the diversion structure, pumps or gravity-fed pipe systems may be used to de-water sites.
4. Because the creek supports an anadromous fishery, diversions shall maintain habitat connectivity and result in no changes in flow quality or quantity from pre-project conditions.
5. Bypassed flows can be slowly reintroduced into the dewatered area by leaving a silt barrier in place to allow water to slow and drop sediment to the extent possible.

Effectiveness:	Would reduce or eliminate discharge into San Pedro Creek, a known anadromous fishery.
Implementation:	City of Pacifica
Feasibility:	Dewatering is part of the project and can easily be accomplished.
Timing:	Project Implementation.
Monitoring:	City of Pacifica, Department of Public Works

Mitigation HYD-2 Avoid Erosion When Restoring Flows

All temporary diversion structures shall be removed within 48 hours of completion of work. Flows shall be restored in a manner that minimizes erosion.

1. When diversion structures are removed, to the extent practicable, the ponded flows will be directed into the low-flow channel within the work site to minimize downstream water quality impacts.
2. Flows shall gradually be restored to the channel to avoid a surge of water that would cause erosion or scouring.

Effectiveness:	Would reduce or eliminate discharge into San Pedro Creek, a known anadromous fishery.
Implementation:	City of Pacifica
Feasibility:	Avoiding erosion can easily be accomplished.
Timing:	Project Implementation.
Monitoring:	City of Pacifica, Department of Public Works

Mitigation HYD-3 Erosion and Sediment Control Measures

Erosion control measures shall be used as appropriate to control sediment and minimize water quality impacts. Appropriate measures include, but are not limited to, the following:

1. Silt Fences
2. Straw Bale Barriers
3. Brush or Rock Filters
4. Erosion Control Blankets and Mats
5. Soil Stabilization i.e.: Tackified straw with seed, jute or geotextile blankets, etc.

Effectiveness:	Would reduce or eliminate discharge into San Pedro Creek, a known anadromous fishery.
Implementation:	City of Pacifica
Feasibility:	Erosion control measures are part of the project and can easily be accomplished.
Timing:	Project Implementation.
Monitoring:	City of Pacifica, Department of Public Works

Mitigation HYD-4 Handle Sediments So As to Minimize Water Quality Impacts

If sediment needs to be removed from San Pedro Creek, it shall be stored and transported in a manner that minimizes water quality impacts.

1. Wet sediments must be stockpiled within the dewatered portion of San Pedro Creek so water can drain or evaporate before removal. This measure applies to saturated, not damp, sediments.
2. Water draining from stockpiles will not be allowed to flow back into the creek. Silt fences shall be installed along the entire portion of the area downstream and down slope from any stockpile.
3. Streets shall be cleaned of mud and/or dirt by street sweeping, as necessary, and not by hosing down the street.

Effectiveness:	Would reduce or eliminate discharge into San Pedro Creek, a known anadromous fishery.
Implementation:	City of Pacifica
Feasibility:	Proper sediment handling to avoid impacts can easily be accomplished.
Timing:	Project Implementation.
Monitoring:	City of Pacifica, Department of Public Works

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? *(Source #: 9)*

No Impact. There are no known subsurface water supplies in the project area (Pacifica General Plan, 1993). The project would not impact the quality or quantities of subsurface water supplies. The construction of the fish ladder improvements would not require cuts or excavations that would affect groundwater recharge capability. The project would not change the direction or rate of groundwater flow.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? *(Source #s: 11, 13)*

No Impact. The installation of the fish passage improvements will not affect flooding of the creek, nor would not substantially alter the existing drainage pattern or the site or area. It does not affect existing structures nor does it propose new structures that, through grading, may alter drainage patterns.

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? *(Source #s: 11, 13)*

No Impact. See 8c, above.

e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial

additional sources of polluted runoff? *(Source #s: 11, 13)*

No Impact. See 8c, above.

f. Otherwise substantially degrade water quality? *(Source #: 13)*

Less than Significant Impact. See Response 8a and the mitigation measures contained in that response.

g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? *(Source #: 13)*

No Impact. The project does not involve construction of residential structures.

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows? *(Source #: 13)*

No Impact. No new habitable structures would be placed within the 100-year flood hazard area as a result of this project.

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? *(Source #: 13)*

No Impact. The project would not affect existing levees or dams. The project is a secondary part of a major flood control project downstream on San Pedro Creek.

j. Inundation by seiche, tsunami, or mudflow? (*Source #s: 9,13)*

Less than Significant Impact. The project is not located in the potential Tsunami Hazard zone identified on the Geotechnical Hazards map of the Pacifica General Plan. Although the site is comprised of clay and silty clay alluvium, no impacts are expected from seiches or mudflows which could occur in areas of flash floods/heavy rainfall because San Pedro Creek is small and severely constricted by existing housing, and the creek will be revegetated as part of this project. Revegetation with native plants, especially willow and alder trees, will stabilize the slopes of the creek in a manner so as to minimize impacts from mudflows should they occur.

9. Land Use and Planning

Environmental Setting

The proposed Capistrano Street Bridge project site is in the Linda Mar neighborhood, which is in the central part of the San Pedro Valley. The site is completely surrounded by residential development and is about 20 feet wide on average. This residential development was built in the 1960s and the backs of the property lines are at the tops of the San Pedro Creek bank. The Capistrano Bridge is one of three main linkages for the residents east of Linda Mar Boulevard along and adjacent to Rosita Road (the others are Adobe Drive to the west, and to the east, Oddstad Boulevard, where Linda Mar and Rosita come together).

Will the proposed project:

a. Physically divide an established community? *(Source #: 11)*

No Impact. Because the proposed project will not result in any change to existing land uses, it will not disrupt of divide any physical arrangement of the Linda Mar community.

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? *(Source #s: 6,9,10)*

Less than Significant Impact. The project's purpose is to restore the use of the Capistrano Street Bridge, increase fish passage in the creek, and revegetate the existing banks with native plants to increase habitat functions and values. As such, it will not conflict with local land use plans, policies or regulations. Because the project site is in San Pedro Creek, it is within the jurisdiction of both the California Department of Fish and Game (CDFG) and the US Army Corps of Engineers (USACE). Thus, the City of Pacifica will need to apply for a CDFG Section 1601 Streambed Alteration Agreement and a permit from the USACE.

City of Pacifica General Plan

The City of Pacifica has land use authority over the project site. Since the project does not affect existing land uses, it will not conflict with existing City land use plans, policies or zoning regulations. During the temporary construction period it is possible that the project could result in changes to traffic circulation, creation of dust and noise from construction equipment, and possible degradation of water quality. Mitigation measures are included in this document that would avoid or reduce all negative effects to less than significant levels.

State of California

State Department of Fish and Game (CDFG)

Section 1601 of the Fish and Game Code requires any State or local governmental agency or public utility to notify the CDFG before starting a construction project that could: 1) divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake; 2) use materials from a streambed; or 3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. In order to notify the CDFG of a project described above, the person, governmental agency, or public utility (applicant) needs to complete a "Notification of Lake or Streambed Alteration" form, a Project Questionnaire" (FG 2024), and submit these forms, along applicable fees to the CDFG. Conditions set forth in the completed Stream Alteration Agreement will be incorporated into the project.

Federal

a. U. S. Army Corps of Engineers

Since work is proposed in San Pedro Creek in the area below the Capistrano Street bridge (the lower 200-foot section) within the jurisdictional Ordinary High Water line, a Corps permit is required. Ordinary High Water (OHW) is the area that the water in streams and waterways would rise to in a typical or "ordinary" storm event, categorized as a storm that would occur every 2.3 years. The U.S. Army Corps of Engineers (USACE) has jurisdiction and

permitting authority under section 10 of the Rivers and Harbors Act of 1899 over the nation's waterways and their associated wetlands, including OHW. The USACE also has authority under Section 404 of the Clean Water Act to protect the quality of the nation's waters. The USACE regulates potential impacts on wetlands, threatened, or endangered species, other valuable fish and wildlife resources, and cultural resources found in wetland areas. The project is being carried out in partnership between the City of Pacifica and the USACE. The USACE cannot issue itself a Section 404 permit, but instead, must conform to a procedure whereby it satisfies the permit application requirements. Such a process is referred to as "functional equivalency."

Before issuing a permit for certain activities that take place within its jurisdiction, the USACE must consult with the National Marine and Fisheries Service (NMFS) if the project could impact federally listed anadromous fish (such as the steelhead) (an Evolutionary Significant Unit or ECU), and must consult with the FWS if the project could impact federally listed non-marine animal species (such as the California red-legged frog). The process of this consultation is regulated under Section 7 of the Federal Endangered Species Act (ESA) (see below).

b. U. S. National Marine Fisheries Service (NMFS) and U. S. Fish and Wildlife Service (FWS)

The NMFS is charged with protecting federally listed marine wildlife including anadromous fish in accordance with the ESA. The FWS is charged with protecting federally listed non-marine wildlife in accordance with the ESA.

The ESA protects threatened and endangered species by prohibiting federal actions that would jeopardize the continued existence of such species or that would result in the destruction or adverse modification of any critical habitat or such species. Section 7 of the Act requires that consultation regarding protection of such species be conducted with the NMFS and/or FWS prior to project implementation.

Once the USACE initiates formal consultation with NMFS and FWS each agency would evaluate impacts of all aspects of the proposed action on the threatened or endangered species. Their findings are based on review of a Biological Assessment and their results are stated in letters that provide an opinion on whether a proposed action would jeopardize the continued existence of the listed species or modify its critical habitat. If a jeopardy biological opinion is issued, the resource agency will provide reasonable and prudent measures to minimize incidental take (loss or disturbance of individuals) caused by the proposed action.

The USACE has initiated consultation with both the NMFS and FWS for this project. A Biological Assessment has been prepared for the steelhead and has been submitted for NMFS (letter to Joyce Ambrosius from LC Lee and Associates, February 12, 2003). A Biological Assessment has been prepared for the California red-legged frog and has been submitted for FWS (letter to Sheila Larsen from LC Lee and Associates, February 5, 2002). According to NMFS no action to remediate the creek entrenchment at the failed fish ladder represents a "take" by the City under §4(d) of the U.S. Endangered Species Act (ESA), as amended. The City has been thus directed by NMFS to remove this barrier immediately in order not to be found in violation of the ESA's §4(d). This project would be in compliance with the ESA pending the receipt of non-jeopardy opinions from both agencies.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan? *(Source #: 9)*

No Impact. San Pedro Creek is not subject to any habitat conservation plans or natural community conservation plans. The biological resources of the project site are discussed in

Response 4 (Biological Resources) in this chapter.

10. Mineral Resources

Will the proposed project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? *(Source #: 9)*

No Impact. The project would not result in the loss of availability of a known mineral resource, as the project is to repair the Capistrano Street Bridge, remove a fish ladder and construct a new step-pool stream system, and restore a section of San Pedro Creek. No known mineral resources will be mined or used in any phase of this project.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? *(Source #: 9)*

No Impact. No locally important mineral resources are designated at this site in the City of Pacifica General Plan. The project would not result in the loss of availability of any locally important mineral resources.

11. Noise

Environmental Setting

Noise is generally defined as unwanted sound. Sound levels are usually measured and reported in decibels (dB), a unit which describes the amplitude, or extent, of the air pressure changes which produce sound. The major noise sources in City of Pacifica include traffic on Highway 1 and major streets. Most of the land uses in the project site vicinity are residential and open parkland areas (San Pedro County Park, GGNRA). Subsequently, the noise environment of the project vicinity is dominated by the sounds typical of suburban residential areas.

Will the proposed project:

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? *(Source #s: 9,13)*

Less Than Significant Impact. The project would not expose people in the community to permanently excessive noise levels. Residents that live near the project site will be subjected to construction noise for a period of up to four months. Most of the noise will be generated by heavy machinery (a loader and an excavator) that will be used in the construction process. The machinery will have the standard noise muffling devices and construction will be limited to weekdays (M-F) from 8:00 a.m. to 6:00 p.m.

b. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? *(Source #: 13)*

No Impact. There are no sources of ground vibration, such as may occur from railroad lines, in the City of Pacifica.

c. A substantial permanent increase in ambient noise levels in the project

vicinity above levels existing without the project? *(Source #: 13)*

No Impact. See Response 11a, above.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? *(Source #: 13)*

Less Than Significant Impact. See Response 11a, above.

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? *(Source #: 7, 9)*

No Impact. The proposed project is not within the area of any Airport Land Use Plan. The site is approximately five miles west of San Francisco International Airport and 7 miles north of Half Moon Bay Airport. The project site is not significantly affected by noise from aircraft over flights.

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? *(Source #: 13)*

No Impact. The proposed project is not within the vicinity of a private airstrip.

12. Population and Housing

Will the proposed project:

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? *(Source #: 13)*

No Impact. The proposed project is the rehabilitation of the Capistrano Street Bridge, removal of the existing fish ladder at San Pedro Creek upstream and downstream of the Capistrano Street Bridge, and associated creek restoration. The project would not induce population growth in the community.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? *(Source #: 13)*

No Impact. Development of the project would not displace any existing housing.

c. Displace substantial numbers of existing people, necessitating the construction of replacement housing elsewhere? *(Source #: 13)*

No Impact. Development of the project site would not displace people.

13. Public Services

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:

1. **Fire protection?** *(Source #:13)*

No Impact. The project does not increase the need for fire protection services for the Linda Mar neighborhood. The project would not create an adverse impact on fire protection services.

2. **Police protection?** *(Source #: 13)*

No Impact. The project does not increase the need for police protection services for the Linda Mar neighborhood.

3. **Schools?** *(Source #: 13)*

No Impact. The project would not result in increased number of students served by local schools.

4. **Parks?** *(Source #: 13)*

No Impact. The project will not cause an increase in population, nor result in a decrease in existing recreational opportunities.

5. **Other public facilities?** (Source #:13)

No Impact. No other public facilities would be adversely affected by the proposed project.

14. Recreation

Will the proposed project:

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?** *(Source #: 13)*

No Impact. The project will not cause an increase in population, nor result in a decrease in existing recreational opportunities.

b. **Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?** *(Source #: 13)*

No Impact. See Response to comment 14a, above.

15. Transportation/Traffic

Will the proposed project:

a. 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)? *(Source #: 13)*

No Impact. The project is to restore use of the Capistrano Street Bridge, improve fish passage and restore San Pedro Creek. Thus, the project will not increase vehicle trips or lead to traffic congestion.

b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? *(Source #: 13)*

No Impact. See Response 15a, above.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? *(Source #: 13)*

No Impact. The project will not affect air traffic patterns.

d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? *(Source #s: 8, 13)*

No Impact. The Capistrano Bridge was closed to the public on August 29, 2002. Completion of the project will allow the bridge to be reopened.

e. Result in inadequate emergency access? *(Source #s: 8, 13)*

No Impact. See Response 15d, above.

f. Result in inadequate parking capacity? *(Source #: 13)*

No Impact. The project neither reduces or increases parking capacity. Because the project is not a development project, it does not increase population, thus, there is no impact.

g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? *(Source #: 13)*

No Impact. The proposed Capistrano Street Bridge project does not affect alternative transportation programs within Pacifica.

16. Utilities and Service Systems

Will the proposed project:

a. **Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?** *(Source #: 13)*

No Impact. The project is to repair the Capistrano Street Bridge, remove a fish ladder and construct a new step-pool stream system, and restore a section of San Pedro Creek. The project does not generate wastewater.

b. **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?** *(Source #: 13)*

No Impact. The project does not require water or wastewater treatment services. No construction of new water or wastewater treatment facilities or the expansion of existing facilities is required.

c. **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?** *(Source #: 13)*

No Impact. The project does not require the construction of new storm water drainage facilities. No drainage improvements are required as a result of the proposed project.

d. **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?** *(Source #: 13)*

No Impact. Water resources are not affected by the proposed project.

e. **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?** *(Source #: 13)*

No Impact. The capacity of the local wastewater treatment plant serving Pacifica is not affected by the proposed project.

f. **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?** *(Source #: 13)*

No Impact. There is no solid waste generated by the proposed project. The project will not affect the capacity of the landfill which serves the Pacifica community.

g. **Comply with federal, state, and local statutes and regulations related to solid waste?** *(Source #: 13)*

No Impact. There is no solid waste generated by the proposed project. The project is not affected by federal, state and local regulations related to solid waste.

17. Mandatory Findings of Significance

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?

Less than Significant with Mitigation Incorporated. See Responses in Section 8, Hydrology. All potential impacts can be avoided or reduced by the implementation of mitigation measures as listed in Section 8.

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)?

No Impact. Because the project is to fix the Capistrano Street Bridge, restore fish passage and improve the habitat functions and values of San Pedro Creek, no long-term negative cumulative impacts would result. The project would not increase the local population or the demand for housing, thus none of the following environmental issues would be affected: aesthetics; air quality; agriculture; cultural and historical resources; geology; hazards and hazardous materials; land use/planning; mineral resources; population/housing; public services; recreation; transportation/traffic; and utilities.

Regarding biological effects, the Capistrano Bridge Fish Passage Project will have different short-term and long-term cumulative effects to central California coast steelhead that currently utilize San Pedro Creek for spawning. In the short-term (i.e., approximately five months during the time of construction), there will be a decrease in habitat for the steelhead. In the long-term (i.e., after completion of the restoration), the project will have a beneficial effect on the Central California coast steelhead. The creation of a step-pool fish passage system will remove a barrier for upstream adult steelhead migration to spawning gravels, for downstream migration of adults, and juvenile movement through the reach. Thus, longitudinal connectivity will be restored in the main stem of San Pedro Creek.

Additionally, the incorporation of several of the project standards (e.g., increased functioning of native plant species, increased habitat structure) will result in a higher level of ecosystem functioning than exists within the currently degraded plant community.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant with Mitigation Incorporated. The mitigation measures listed in this document will avoid or reduce significant environmental effects to less than significant levels.

V. References

1. Bay Area Air Quality Management District. December 1999. *BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans.*

2. Bay Area Air Quality Management District. December 2000. *Bay Area 2000 Clean Air Plan.* http://www.baaqmd.gov/planning/2000cap/2kfincap.pdf

3. California Air Resources Control Board website. January 25, 2002. *Air Monitoring Stations GPS Locations* http://www.arb.ca.gov/aqdas/gpsqbe.php3

4. California Air Resources Control Board website. August 1, 2002. *Area Designations (Activities and Maps)* http://www.arb.ca.gov/desig/desig.htm

5. California Department of Toxic Substances Control website. November 8, 2002. http://www.dtsc.ca.gov/database/Calsites/Cortese_List.cfm

6. California Natural Diversity Database (CNDDB), June 2002.

7. California State Automobile Association. October 2002. *San Francisco Bay Map.*

8. California State Automobile Association. April 2000. *Daly City-South San Francisco Map.*

9. City of Pacifica. June 1993. *General Plan*

10. ----------. Zoning Ordinance

11. Field Inspection. March 2003.

12. Preparer's knowledge of the area.

13. Preparer's experience with other projects of this size and nature.

14. United States Geological Survey. 1993. Topographical Map. Montara Mountain Quadrangle.

VI. Report Preparers

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Virginia Justus, Associate

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?	☐	☐	☐	■
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	■	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	■

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TABLE 1 – SUMMARY OF MITIGATION MEASURES S-1

I. Introduction

This Initial Study/Mitigated Negative Declaration addresses the potential environmental impacts associated with fish passage improvements to the Capistrano Bridge area of San Pedro Creek in the City of Pacifica. These fish passage improvements consist of reinforcing the existing footings of the Capistrano Street Bridge by raising the bottom elevation of the stream channel, removing the temporary weir (fish ladder) (which has segments both upstream and underneath the Capistrano Bridge), and the construction of a new step-pool fish passage system that is natural in appearance that will allow spawning steelhead to migrate upstream past this point. Restoration of 1300 feet of creek will also be accomplished as part of this project.

In addition to specific site surveys and analysis, this Initial Study incorporates environmental data contained in the following documents:

- Biological Assessment for the Steelhead for the Capistrano Bridge Fish Passage Project, Pacifica, CA. January 31, 2002, revised February 12, 2003. Prepared by L.C. Lee Associates (LCLA) for the City of Pacifica;
- Biological Assessment for the California Red-legged Frog for the Capistrano Bridge Fish Passage Project, Pacifica, CA. February 5, 2002, prepared by LCLA for the City of Pacifica; and
- Joint EIR/EIS for the San Pedro Creek Flood Control Project, Pacifica, CA (January 1998), prepared by the City of Pacifica and the U.S. Army Corps of Engineers, San Francisco District.

The analysis contained herein demonstrates that the proposed project will not have any significant environmental impact after mitigation measures have been implemented.

This Initial Study/Mitigated Negative Declaration has been prepared in compliance with the California Environmental Quality Act (CEQA)(Public Resources Code 21000 et seq.) and the State CEQA Guidelines (California Administrative Code 15000 et seq.), as amended. According to Section 15070 of the CEQA Guidelines:

"A public agency shall prepare or have prepared a proposed Negative Declaration or mitigated negative declaration for a project subject to CEQA when:

(a) The Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or

(b) The Initial Study identifies potentially significant effects but:

(1) Revisions in the project plans or proposals made by or agreed to by the applicant before a proposed mitigated negative declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

(2) There is no substantial evidence, in light of the whole record before the agency that the project as revised may have a significant effect on the environment.

The CEQA Guidelines Section 15382 defines a significant effect on the environment as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, mineral, flora, fauna, ambient noise, and object of historic or aesthetic significance.

This document has been prepared as an objective, full-disclosure report to inform agency decision makers and the general public of the direct and indirect physical environmental effects of the proposed action and any measures to reduce or eliminate potential adverse impacts. This document has six sections:

1. **Summary.** This section briefly describes the development project and lists the potentially significant environmental impacts that have been reduced to less than significant levels with mitigation incorporated into the project. A table of all the mitigation measures is presented.
2. **Project Description.** This section provides a vicinity description of the project site and a description of the proposed subdivision and site improvements.
3. **Initial Study Checklist.** The Initial Study Checklist is a standard form used to examine the full range of potential environmental effects and is the basis used to determine the elements of the Negative Declaration. The form is based upon the 1999 California Environmental Quality Act (CEQA) Guidelines.
4. **Responses to the Checklist Questions.** The Response section provides detailed answers to the questions on the Checklist and identifies potentially significant impacts, mitigation measures to reduce those impacts, and a conclusion of impact after mitigation.
5. **References.** CEQA Guidelines state that a brief explanation is required for all answers except "No Impact " answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
6. **Report Preparers.** This section identifies the consultants who prepared this project.

S. Summary

This Initial Study/Mitigated Negative Declaration describes the potential environmental impacts associated with the Capistrano Bridge Fish Passage project. The Initial Study identifies potentially significant impacts and identifies mitigation measures to reduce the impacts to less than significant. The project impacts and mitigation measures are summarized below in Table 1. Since the project does not involve a direct change in the physical environment, the potential environmental effects of the project are limited to: aesthetics, biology, geology, hydrology, land use, and recreation.

TABLE 1
SUMMARY OF MITIGATION MEASURES

Air Quality	
IMPACT: The proposed upgrade of the Capistrano Street Bridge, removal of existing fish ladder and creek restoration will not generate permanent air pollutants or create air quality impacts. However, sensitive receptors could be exposed to air pollution emissions and high levels of dust during the construction phase of this project. Construction Best Management Practices (BMPs) as listed in the Bay Area Air Quality's CEQA Guidelines (1996) shall apply as mitigation measures: **Potentially Significant Impact**	**Mitigation AQ-1:** The following construction related Best Management Practices (BMPs) shall apply: 1. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. 2. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. 3. Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph **Less than Significant Impact After Mitigation**
HYDROLOGY	
IMPACT: Direct effects from the construction of the bridge and fish passage system associated with the Capistrano Bridge Project could include (1) temporary degradation of habitat during the restoration of the stream reach and (2) temporary dewatering of that portion of the creek bed under construction for restoration, These effects, however, will be temporary and construction will be conducted during the low water months (July-August) and under consultation with the	**Mitigation HYD-1 Dewater Creek During Construction.** If water is present at the work site, a diversion structure (which can be made of various materials sheet piles, inflatable dams, sand bags, river run gravel, or other similar materials) shall be constructed, as needed, to isolate the work area and avoid or minimize downstream water quality impact. Stream water will be diverted around the work site in a pipe (pumped or gravity). 1. All water shall be discharged from the pipe back into the stream below the project site in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic). 2. Sumps or basins may also be used to collect water (if the creek has low flows during the construction phase). 3. In conjunction with the diversion structure, pumps or gravity-fed pipe systems may be used to de-water sites.

NMFS, the USFWS and the CDFG so as to avoid water quality and water availability impacts on steelhead and red-legged frogs. Indirect effects could include (1) introduction of a small amount of sediment into the stream channel through the removal of existing vegetation and the construction of the dirty. riprap, (2) temporary elevation of water temperature through the removal of existing riparian vegetation within the construction reach, and (3) temporary disruption of longitudinal connectivity within the restoration reach at the Capistrano Bridge. The first two indirect effects may persist for a short time beyond the construction interval. However, should they occur, it is not expected that either will persist beyond the first two growing seasons. Shortly after the nursery stock has established within the restoration site, fine root biomass produced in the upper soil profile will stabilize the newly planted slopes. Additionally, tree and shrub canopies will close and provide shade to the instream environment within the first two to five years. Appropriate Best Management Practices (BMPs) as part of the Storm Water Pollution Prevention Plan (SWPPP) will be in place throughout the construction process to avoid and minimize any water quality degradation as a result of grading operation on the site. In addition to the use of BMPs, the City will perform water quality monitoring to make sure the BMPs are working properly to assure there is no discharge of pollutants from the site. **Potentially Significant Impact**	4. Because the creek supports an anadromous fishery, diversions shall maintain habitat connectivity and result in no changes in flow quality or quantity from pre-project conditions. 5. Bypassed flows can be slowly reintroduced into the dewatered area by leaving a silt barrier in place to allow water to slow and drop sediment to the extent possible. **Less than Significant Impact After Mitigation** **Mitigation HYD-2 Avoid Erosion When Restoring Flows** All temporary diversion structures shall be removed within 48 hours of completion of work. Flows shall be restored in a manner that minimizes erosion. 1. When diversion structures are removed, to the extent practicable, the ponded flows will be directed into the low-flow channel within the work site to minimize downstream water quality impacts. 2. Flows shall gradually be restored to the channel to avoid a surge of water that would cause erosion or scouring. **Less than Significant Impact After Mitigation** **Mitigation HYD-3 Erosion and Sediment Control Measures** Erosion control measures shall be used as appropriate to control sediment and minimize water quality impacts. Appropriate measures include, but are not limited to, the following: 1. Silt Fences 2. Straw Bale Barriers 3. Brush or Rock Filters 4. Erosion Control Blankets and Mats 5. Soil Stabilization i.e.: Tackified straw with seed, jute or geotextile blankets, etc. **Less than Significant Impact After Mitigation** **Mitigation HYD-4 Handle Sediments So As to Minimize Water Quality Impacts** If sediment needs to be removed from San Pedro Creek, it shall be stored and transported in a manner that minimizes water quality impacts. 1. Wet sediments must be stockpiled within the dewatered portion of San Pedro Creek so water can drain or evaporate before removal. This measure applies to saturated, not damp, sediments. 2. Water draining from stockpiles will not be allowed to flow back into the creek. Silt fences shall be installed along the entire portion of the area downstream and down slope from any stockpile. 3. Streets shall be cleaned of mud and/or dirt by street sweeping, as necessary, and not by hosing down the street. **Less than Significant Impact After Mitigation**

II. Project Description

A. PROJECT LOCATION AND SITE DESCRIPTION

The City of Pacifica (City) is located along the Pacific Coast in northwest San Mateo County, three miles south of the City of San Francisco (Figure 1). The City is situated among three isolated valleys and open hillsides, as well as beaches and rocky bluffs. It is surrounded on three sides by the Santa Cruz Mountains and by the Pacific Ocean on the west.

San Pedro Creek is a perennial (year-round) steelhead stream in the southern portion of the City, with a 7.99 square mile watershed. San Pedro Creek is considered by many to be a unique biological resource in the greater San Francisco Bay region (Titus et al.1997), because it is one of only four Central California Coastal streams that still support a viable anadromous fishery. San Pedro Creek is, in fact, the only stream with a steelhead population along a 25-mile reach of coast between the Golden Gate Bridge and the City of Half Moon to the south (LCLA 2002). The fishery still exists within the watershed in large part because the cool springs in the headwaters of San Pedro Creek are protected within the Golden Gate National Recreation Area (GGNRA).

The project site is located along San Pedro Creek, in the middle Linda Mar residential district of the City (37° 34.030' N latitude and 122° 29.030' W longitude); see Figure 2. The creek has a narrow riparian corridor in the area of the Capistrano Bridge as the back yards of houses line the creek on both sides both above and below the bridge. The locations of the work areas are illustrated in Figure 3.

B. PROJECT OBJECTIVES

This project is sponsored jointly by the City of Pacifica and the U.S. Army Corps of Engineers. The primary objectives of the project are to:

(1) Repair the Capistrano Avenue Bridge at San Pedro Creek, thereby restoring the integrity and stability of the structure,
(2) Provide a permanent solution to allow for the passage of the federally protected steelhead throughout this reach of San Pedro Creek, and
(3) Restore the stream/wetland ecosystem functions to San Pedro Creek in and adjacent to the Capistrano Avenue Bridge crossing of San Pedro Creek.

It is the purpose of this Initial Study to assess the environmental effects associated with the project proposal in accordance with the California Environmental Quality Act (CEQA). Because the project will be awarded federal funding through the US Army Corps of Engineers, the environmental effects must also be analyzed in accordance with the National Environmental Policy Act (NEPA). The specific USACE project is described in Section F, below.

Bridge Repair

The bridge at the Capistrano Avenue crossing of San Pedro Creek was built in 1932 as a one-lane structure. In 1952, the bridge was expanded and lengthened to its current two-lane configuration. A Denil fish ladder also was installed (S. Holmes, pers. comm. to LCLA, 2002). Pacifica residents heavily utilize this bridge because it is one of the few road crossings of the

main stem of San Pedro Creek within the Linda Mar neighborhood. It connects the north and south neighborhoods of the eastern Linda Mar district. School buses, city buses, and local automobile traffic continuously cross this bridge. However, within the last decade, due to a series of highly erosive stream flows, Capistrano Bridge has become increasingly unsafe for human traffic.

Specifically, recent channel erosion and entrenchment by San Pedro Creek have undercut the Capistrano Bridge footings. Entrenchment also has eroded the stream banks immediately downstream of the bridge. Both channel entrenchment and stream bank erosion constitute serious threats to the integrity to the bridge as well as to the adjacent private homes and apartment complexes on the south bank. The integrity of the Capistrano Bridge is so compromised that it was determined to be dangerous to the public by a local structural engineering firm (SURE Engineers, Inc. 2002), Pacifica's Director of Emergency Services, and the Pacifica City Council.

With respect to the structural assessment, Mr. Carl Chan (SURE Engineers, Inc.) surveyed the bridge on August 29, 2002, and determined that approximately 10 feet on both sides of the bridge's underfooting are not supported. Additionally, Mr. Chan noted that five feet of downcutting of the creekbed has occurred over the last four years. He projected that this stream entrenchment would continue at a similar rate. Overall, the bridge is considered a severe structural concern due to (1) its age, (2) the condition of the existing concrete, (3) the existing undermined footing, and (4) the continued undercutting of bridge abutments. Mr. Chan concluded that the Capistrano Bridge poses an extreme life and safety hazard, and urged that the bridge be closed immediately and remain closed until the bridge is repaired to eliminate the potential for loss of human life and injury due to its collapse (SURE Engineering, Inc. 2002).

In response to Pacifica's assessment of the bridge's structural integrity, the Director of Emergency Services of the City of Pacifica proclaimed the Capistrano Bridge to be a local emergency. According to the proclamation, the safety of humans and property are in extreme peril. As a result of the engineering assessment and the local proclamation, the Capistrano Bridge crossing was closed to the public on August 29, 2002. On September 9, 2002, the City Council of Pacifica signed a resolution endorsing the emergency repair of the Capistrano Bridge.

Allow Fish Passage

The Capistrano Bridge currently is viewed by the regulatory agencies, (i.e., National Marine Fisheries Service (NMFS) and the California Department of Fish and Game (CDFG)) as a barrier to steelhead migration, as determined by NMFS staff at a site visit in January 2001. According to NMFS, no action to remediate the creek entrenchment at the failed fish ladder represents a "take" by the City under §4(d) of the U.S. Endangered Species Act (ESA), as amended. The City has been directed by NMFS to remove this barrier immediately in order not to be found in violation of the ESA's §4(d).

In the late winter of 2000-2001, the City responded to the agencies' concerns by constructing a temporary weir to improve fish passage at the Capistrano Bridge. Specifically, between April 6 and 12, 2001, the City, in cooperation with its consultants (LCLA, Seattle, Washington; Go Native Nursery, Moss Beach, California), and its general contractor (Power Engineering, Alameda, California), constructed a temporary weir step-pool complex, consisting of a series of two pools that provide resting habitat for migrating steelhead. A total of 1,984 tons of boulders were placed as fill in San Pedro Creek to construct the temporary weir complex, with an addition of approximately 45 ft3 of stones and 125 ft3 of sand bags. Total fill volume was 2,154 cubic feet. The weir complex was constructed to last a minimum of two winters, and

maintenance of the weirs is under the direction of the Department of Public Works. This work was authorized by Department of the Army Nationwide Permit No. 18 (Regulatory Permit No. 25971S), issued by the San Francisco District, Corps of Engineers, on March 26, 2001.

San Pedro Creek Restoration

The City of Pacifica is engaged in a large, citizen-supported effort to restore the San Pedro Creek watershed. The earliest efforts date to the mid-1980s when the local citizenry, public officials, and the U.S. Army Corps of Engineers engaged in a long period of discussion for the development of a flood control project which could be environmentally acceptable to the town's citizens. The result was a flood control project that provides the control of floodwaters in a restored floodplain at the lower reach. Additionally, the San Pedro Creek Watershed Coalition (Coalition) was formed in the late 1990's by local citizens to help restore the creek. The Coalition is a non-profit citizen's group that has received funding for several projects in the creek, including the removal of non-native species and the replacement of a failed culvert in the upper watershed within San Pedro County Park.

The San Pedro Creek Wetland Ecosystem Restoration and Flood Control Project is a $7 million public works project that is jointly planned, authorized permitted and constructed by the U.S. Army Corps of Engineers (ACE) and the City. In August 2000, construction began on the first of two phases of the project.

City officials also have initiated restoration of an additional reach of San Pedro Creek, which extends from the eastern most limit of the current restoration project job (i.e., Linda Mar Convalescent Hospital) to the Peralta Street Bridge. This restoration is considered Phase III of the waters/wetlands ecosystem restoration of lower San Pedro Creek. Initial design is underway to lay back the south bank along this 1,300 ft reach, remove non-native vegetation, widen the channel, and replant with native species in a plant community type complex identical to the lower restoration effort.

C. PROJECT CHARACTERISTICS

Bridge Repair

1. Operational Improvements to Capistrano Bridge

With respect to the structural stability of the Capistrano Street Bridge, it will be primarily reinforced by burying the footings as a result of raising the bottom elevation of the stream channel. If necessary, additional reinforcement may be accomplished by injecting concrete into the existing structure to shore up the bridge's bulk footings. Old concrete will be replaced or reinforced. Construction will be performed during low water intervals to limit the potential of fresh concrete coming into contact with creek waters.

2. Civil Construction to Prevent Further Entrenchment at the Capistrano Bridge

The overall streambed will be approximately graded to achieve a 17.4 feet elevational difference over 700 feet. Grouted rock cut off walls will be spaced at 26 feet on the center, with an eight-inch elevation drop between walls (Figure 4). Two to six ton rocks will be placed on either side of the streambed, and the spacing of the rocks will allow willows to grow quickly to provide shade over the stream. Plant community restoration will have the overall effect of increasing microtopographic roughness through slope rugosity, as well as increasing

significantly vegetative roughness. Increase in roughness will slow water as it moves through the restoration reach.

Allow Fish Passage

1. Construction of the Fish Passage Step-Pool Complex

Construction activities within the bed of San Pedro Creek will involve the removal of the existing fish ladder, which has segments both upstream and underneath the Capistrano Bridge and the construction of a new step-pool fish passage system that is natural in appearance that will allow spawning steelhead to migrate upstream past this point.

Conceptual designs of the fish passage systems currently are based on a series of step pools that rise in elevation from down gradient of each bridge to some distance up gradient of each bridge (Figures 4 and 5). Pools will be large enough to support a "dead zone" that allows resting habitat, and deep enough to allow fish to jump to the next pool. Between each pool will be a short run to allow fish to pass without much effort.

An important design feature for the custom fish passage complex is a construction that allows for juvenile steelhead to move along the channel in a variety of flows (*i.e.*, between 20-95% exceedance flows). In addition, the fish passage will minimize the jumps juveniles will have to negotiate, limiting the jumps to 6 inches in faster moving waters to 2 ft in slower waters. In terms of the adult steelhead, the jumping pool depth will be at minimum three ft at the base of the fall, greater than the length of the fish. A minimum of ten feet will exist between jumping pools, and a maximum spacing between larger resting pools will be approximately 100 feet.

2. Longitudinal Connectivity in San Pedro Creek

Freshwater riparian wetlands are considered among the most threatened ecosystems along the California Coast (California Coastal Conservancy 1993). This proposed mitigation plan for the Calera Parkway Expansion Project, designed by L. C. Lee Associates (LCLA), uses the hydrogeomorphic functional assessment method (HGM) which includes four broad categories of ecosystem functions performed by riverine wetlands (Brinson *et al.* 1995). These four categories include (1) hydrology, (2) biogeochemistry, (3) maintenance of native plant communities, and (4) faunal support/habitat. The habitat/faunal support waters/wetlands ecosystem function is emphasized in this project because of the known occurrences of two vertebrate species of conservation concern. Using HGM, waters/wetlands in a geographic region are assigned to a class of wetlands, such as riverine, depressional or lacustrine. The class of waters/wetlands is then refined to the subclass level, *e.g.*, 3rd order stream).

a. Hydrology

The City's design team has set as the project target for the restoration of hydrologic functions on the restoration site: restore a more natural site water balance to San Pedro Creek at the Capistrano Bridge crossing. Restoration of a more natural site water balance will guide other elements of the restoration project (*e.g.*, restoration of native plant communities). The following project standards will be used to guide the final design and to attain the project target: (1) remove 669 ft long concrete culvert upstream of the Capistrano Bridge, and (2) create a step-pool complex over an approximately 2,000 ft reach to remove existing barrier to fish passage.

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 /Soils**
☐ **Hazards & Hazardous Materials**	■ **Hydrology / Water Quality**	☐ **Land Use / Planning**
☐ **Mineral Resources**	☐ **Noise**	☐ **Population / Housing**
☐ **Public Services**	☐ **Recreation**	☐ **Transportation/Traffic**
☐ **Utilities / Service Systems**	■ **Mandatory Findings of Significance**	

III. Environmental Checklist Form

III. ENVIRONMENTAL CHECKLIST FORM

A. Project Information

1. **Project Title:** Capistrano Bridge Fish Passage Project

2. **Lead Agency Name and Address:** City of Pacifica, 170 Santa Maria Avenue, Pacifica, CA 94044

3. **Contact Person and Phone Number:** Scott Holmes, Director of Public Works. Phone: 650-738-4660, Fax: 650-355-7256

4. **Project Location:** Along San Pedro Creek, in the middle Linda Mar residential district of the City. Restoration activities will start approximately 1,300 ft downstream of the 60 ft wide Capistrano Street Bridge and continue approximately 550 ft upstream of the bridge.

5. **Project Sponsor's Name and Address:** City of Pacifica, 170 Santa Maria Avenue, Pacifica, CA 94044

6. **General Plan Designation:** N/A

7. **Zoning:** N/A

8. **Description of the Project:** See above under Chapter II, Section C.

9. **Surrounding Land Uses and Setting:** San Pedro Creek in the area of the Capistrano Bridge is surrounded by existing homes. The back yards of these homes back up to the narrow riparian corridor on both sides of the creek above and below the creek.

10. **Other public agencies whose approval is required:** The project would require approval and/or permitting from the following agencies; 1) City of Pacifica, 2) U.S. National Marine Fisheries Service, 3) U.S. Fish and Wildlife Service, 4) California Department of Fish and Game, and the 5) the U.S. Army Corps of Engineers.

FIGURE II-5 - GRADING PLAN SCHEMATICS

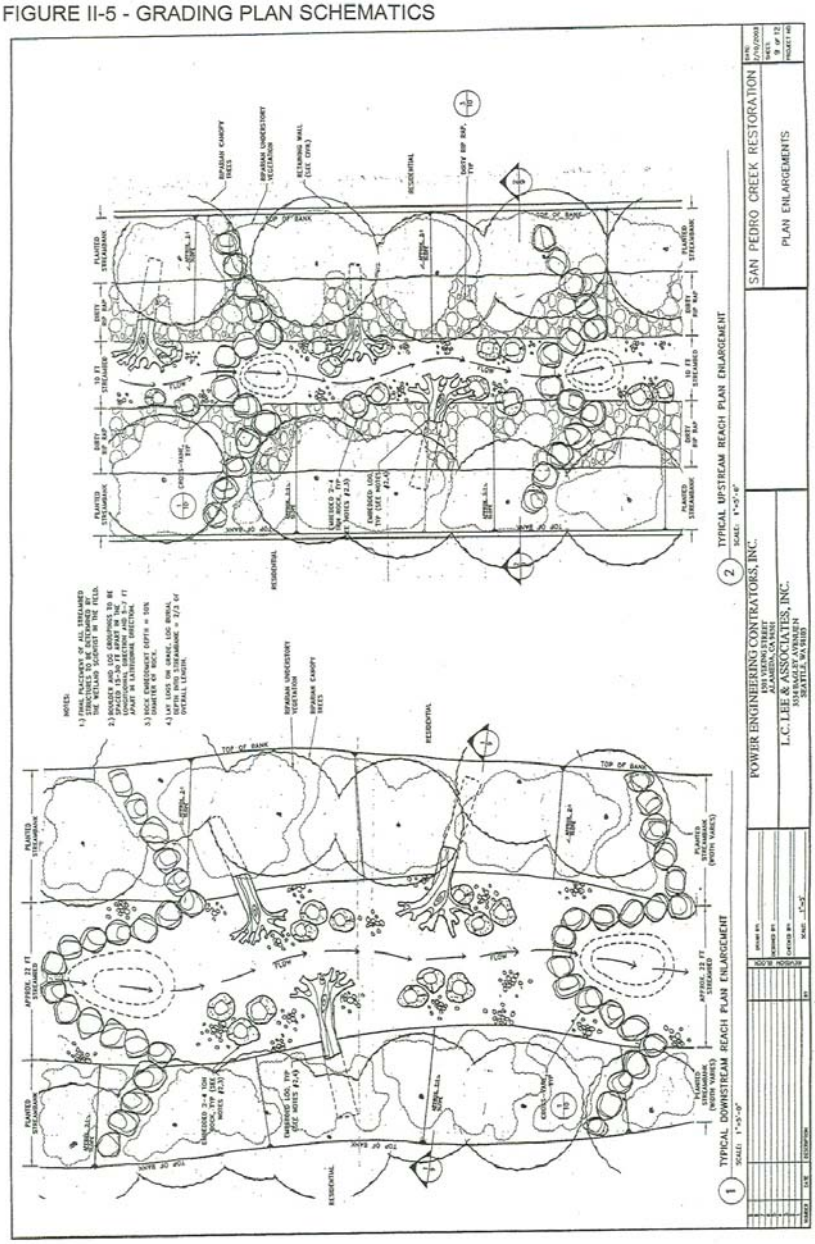


FIGURE II-4 - GRADING PLAN DETAILS

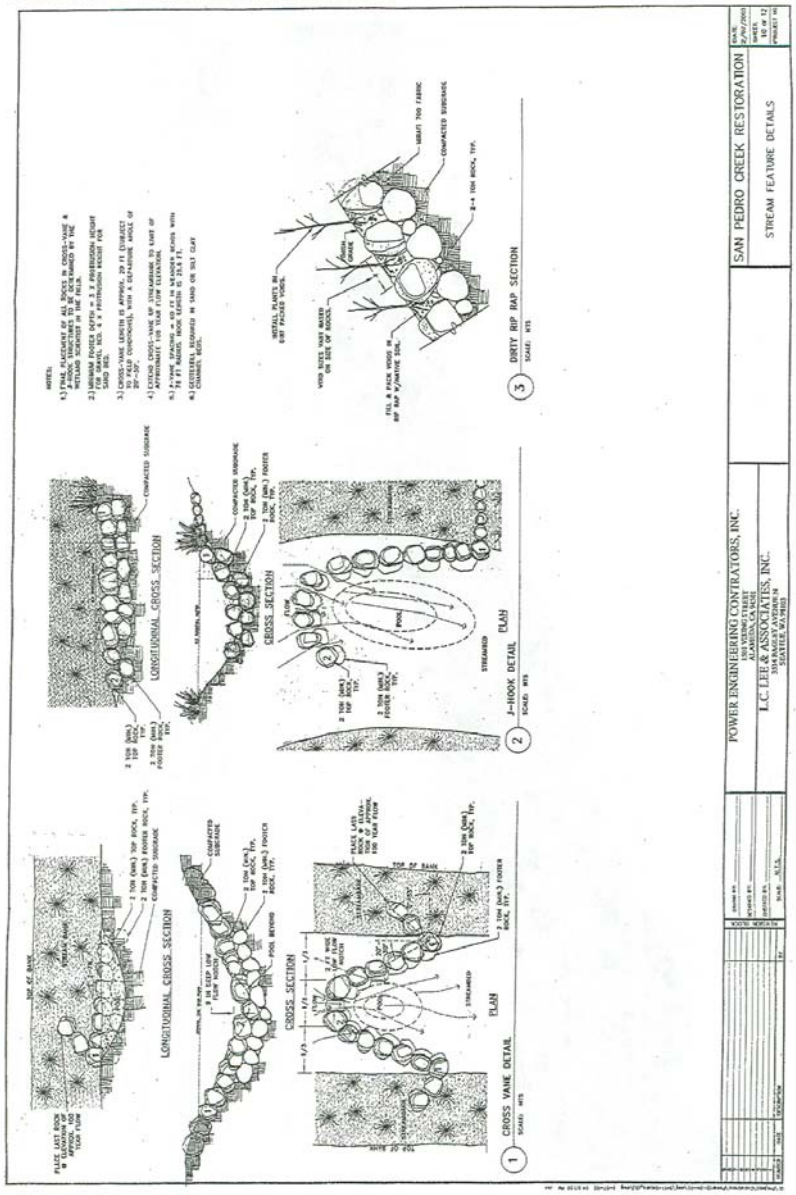
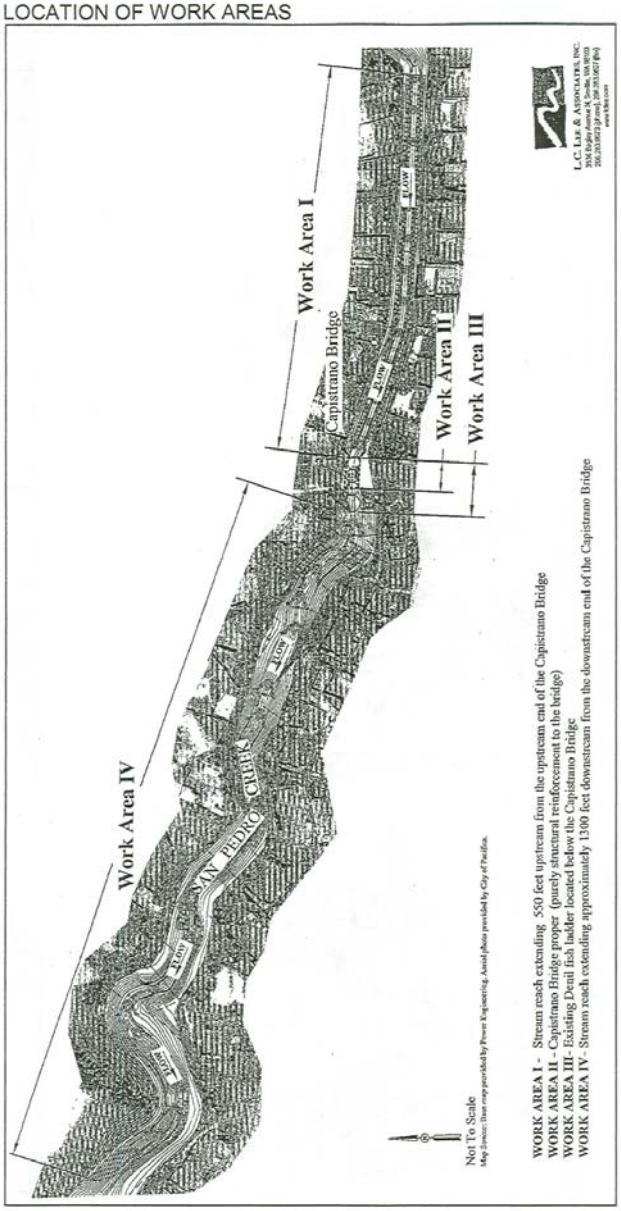


FIGURE II-3 - LOCATION OF WORK AREAS



3) Streets shall be cleaned of mud and/or dirt by street sweeping, as necessary, and not by hosing down the street.

Significance after Mitigation: Less than Significant Impact

3. A Mitigated Negative Declaration will be filed as the appropriate CEQA document of the Project.

BASIS OF FINDINGS

Based on the environmental evaluation presented herein, the Project will not cause significant adverse effects related to aesthetics, agricultural resources, cultural resources, geology/soils, hazards and hazardous materials, land use/planning, mineral resources, population/housing, public services, recreation, transportation/traffic, and utilities/service systems. In addition, substantial adverse effects on humans, either direct or indirect, will not occur. The Project does not affect any important examples of the major periods of California prehistory or history. Nor will the Project 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.

Since the project does not involve a direct change in the physical environment, the potential environmental effects of the project are limited to: aesthetics, biology, geology, hydrology, land use, and recreation. Based on the Initial Study, the mitigation measures avoid, minimize, and reduce impacts to these environmental effects to less than significant levels.

Attached is the Initial Study prepared for the Project. The public can review documents used in preparation of the Initial Study at the City of Pacifica, Department of Public Works, 170 Santa Maria Avenue, Pacifica, California 94044, Attn: Scott Holmes, Director.

1) All water shall be discharged from the pipe back into the stream below the project site in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic).
2) Sumps or basins may also be used to collect water (if the creek has low flows during the construction phase).
3) In conjunction with the diversion structure, pumps or gravity-fed pipe systems may be used to de-water sites.
4) Because the creek supports an anadromous fishery, diversions shall maintain habitat connectivity and result in no changes in flow quality or quantity from pre-project conditions.
5) Bypassed flows can be slowly reintroduced into the dewatered area by leaving a silt barrier in place to allow water to slow and drop sediment to the extent possible.

Significance after Mitigation: Less than Significant Impact

Mitigation HYD-2 Avoid Erosion When Restoring Flows

All temporary diversion structures shall be removed within 48 hours of completion of work. Flows shall be restored in a manner that minimizes erosion.

1) When diversion structures are removed, to the extent practicable, the ponded flows will be directed into the low-flow channel within the work site to minimize downstream water quality impacts.
2) Flows shall gradually be restored to the channel to avoid a surge of water that would cause erosion or scouring.

Significance after Mitigation: Less than Significant Impact

Mitigation HYD-3 Erosion and Sediment Control Measures

Erosion control measures shall be used as appropriate to control sediment and minimize water quality impacts. Appropriate measures include, but are not limited to, the following:

1) Silt Fences
2) Straw Bale Barriers
3) Brush or Rock Filters
4) Erosion Control Blankets and Mats
5) Soil Stabilization i.e.: Tackified straw with seed, jute or geotextile blankets, etc.

Significance after Mitigation: Less than Significant Impact

Mitigation HYD-4 Handle Sediments So As to Minimize Water Quality Impacts

If sediment needs to be removed from San Pedro Creek, it shall be stored and transported in a manner that minimizes water quality impacts.

1) Wet sediments must be stockpiled within the dewatered portion of San Pedro Creek so water can drain or evaporate before removal. This measure applies to saturated, not damp, sediments.
2) Water draining from stockpiles will not be allowed to flow back into the creek. Silt fences shall be installed along the entire portion of the area downstream and down slope from any stockpile.

Air Quality:

IMPACT: The proposed upgrade of the Capistrano Street Bridge, removal of existing fish ladder and creek restoration will not generate permanent air pollutants or create air quality impacts. However, sensitive receptors could be exposed to air pollution emissions and high levels of dust during the construction phase of this project. Construction Best Management Practices (BMPs) as listed in the Bay Area Air Quality's CEQA Guidelines (1996) shall apply as mitigation measures:

Mitigation AQ-1: The following construction related Best Management Practices (BMPs) shall apply:

1) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
2) Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
3) Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph

Significance after Mitigation: Less than Significant Impact

Hydrology and Water Quality:

IMPACT: Direct effects from the construction of the bridge and fish passage system associated with the Capistrano Bridge Project could include (1) temporary degradation of habitat during the restoration of the stream reach and (2) temporary dewatering of that portion of the creek bed under construction for restoration, These effects, however, will be temporary and construction will be conducted during the low water months (July-August) and under consultation with the NMFS, the USFWS and the CDFG so as to avoid water quality and water availability impacts on steelhead and red-legged frogs.

Indirect effects could include (1) introduction of a small amount of sediment into the stream channel through the removal of existing vegetation and the construction of the dirty riprap, (2) temporary elevation of water temperature through the removal of existing riparian vegetation within the construction reach, and (3) temporary disruption of longitudinal connectivity within the restoration reach at the Capistrano Bridge. The first two indirect effects may persist for a short time beyond the construction interval. However, should they occur, it is not expected that either will persist beyond the first two growing seasons. Shortly after the nursery stock has established within the restoration site, fine root biomass produced in the upper soil profile will stabilize the newly planted slopes. Additionally, tree and shrub canopies will close and provide shade to the instream environment within the first two to five years.

Appropriate Best Management Practices (BMPs) as part of the Storm Water Pollution Prevention Plan (SWPPP) will be in place throughout the construction process to avoid and minimize any water quality degradation as a result of grading operation on the site. In addition to the use of BMPs, the City will perform water quality monitoring to make sure the BMPs are working properly to assure there is no discharge of pollutants from the site.

Mitigation HYD-1 Dewater Creek During Construction.

If water is present at the work site, a diversion structure (which can be made of various materials sheet piles, inflatable dams, sand bags, river run gravel, or other similar materials) shall be constructed, as needed, to isolate the work area and avoid or minimize downstream water quality impact. Stream water will be diverted around the work site in a pipe (pumped or gravity).

Mitigated Negative Declaration

DATE: May 5, 2003
SUBJECT: Mitigated Negative Declaration

Pursuant to the California State Public Resources Code and the California Environmental Quality Act (CEQA) Guidelines, as amended to date, the City of Pacifica (City) submits a Mitigated Negative Declaration for the Capistrano Bridge Fish Passage Project (Project).

PROJECT OVERVIEW

The City of Pacifica (City) is located along the Pacific Coast in northwest San Mateo County, three miles south of the City of San Francisco. The City is situated among three isolated valleys and open hillsides, as well as beaches and rocky bluffs. It is surrounded on three sides by the Santa Cruz Mountains and by the Pacific Ocean on the west.

San Pedro Creek is a perennial (year-round) steelhead stream in the southern portion of the City, with a 7.99 square mile watershed. San Pedro Creek is considered by many to be a unique biological resource in the greater San Francisco Bay region (Titus et al.1997), because it is one of only four Central California Coastal streams that still support a viable anadromous fishery. San Pedro Creek is, in fact, the only stream with a steelhead population along a 25-mile reach of coast between the Golden Gate Bridge and the City of Half Moon to the south (LCLA 2002). The fishery still exists within the watershed in large part because the cool springs in the headwaters of San Pedro Creek are protected within the Golden Gate National Recreation Area (GGNRA).

The project site is located along San Pedro Creek, in the middle Linda Mar residential district of the City (37° 34.030' N latitude and 122° 29.030' W longitude). The creek has a narrow riparian corridor in the area of the Capistrano Bridge as the back yards of houses line the creek on both sides both above and below the bridge.

This project is sponsored jointly by the City of Pacifica and the U.S. Army Corps of Engineers.

FINDINGS

The City, having reviewed the Initial Study for the proposed project, finds that:

1. The proposed project will:

   (1) Repair the Capistrano Avenue Bridge at San Pedro Creek, thereby restoring the integrity and stability of the structure,
   (2) Provide a permanent solution to allow for the passage of the federally protected steelhead throughout this reach of San Pedro Creek, and
   (3) Restore the stream/wetland ecosystem functions to San Pedro Creek in and adjacent to the Capistrano Avenue Bridge crossing of San Pedro Creek.

2. The project will not affect the following environmental effects as identified in the Initial Study Checklist as exceeding significance thresholds. All significant effects can either be avoided or reduced through the implementation of mitigation measures found in this document.

concrete into the existing structure to shore up the bridge's bulk footings. Old concrete will be replaced or reinforced. Construction will be performed during low water intervals to limit the potential of fresh concrete coming into contact with creek waters.

2. Civil Construction to Prevent Further Entrenchment at the Capistrano Bridge

The overall streambed will be approximately graded to achieve an approximately 30 feet elevational difference over approximately 1930 feet. Grouted rock cut off walls will be spaced at 26 feet on the center, with an eight-inch elevation drop between walls (see Figure 4). Two to six ton rocks will be placed on either side of the streambed, and the spacing of the rocks will allow willows to grow quickly to provide shade over the stream. Plant community restoration will have the overall effect of increasing microtopographic roughness through slope rugosity, as well as increasing significantly vegetative roughness. Increase in roughness will slow water as it moves through the restoration reach.

In order to assure compliance with NEPA, this Initial Study has been jointly prepared as an Environmental Assessment (EA). The USACE has guidelines for implementing NEPA (US ACE, March 4, 1988). The guidelines state that no special format is required for an EA, but the EA should include:

- a brief discussion of the need for the proposed action,
- a discussion of alternative if there are unresolved conflicts concerning alternative uses of available resources,
- a discussion of environmental impacts of the action and alternatives, and
- a list of agencies, interested groups, and other persons consulted.

There are no unresolved conflicts concerning alternative uses of available resources. The temporary fish ladder must be replaced and the bridge must be reinforced. The City has been informed by the National Marine Fisheries Service that the fish ladder must be repaired to function properly. Early on in the planning stages, alternative designs for the fish passage were considered, but the proposed project was determined to be the best solution by all participants (City, USFWS, CDFG, USACE).

A discussion of the environmental impacts of the project are included in Section III and a list of persons and agencies consulted is contained in Section IV. B.

10. Monitoring

Monitoring the success of the new fish passage system and the progress of the creekside wetland and riparian ecosystem restoration project is an important element of the construction project. The City team will prepare yearly monitoring reports for five years over a ten-year period after the restoration project is completed. Monitoring reports will document the progress of the restoration towards the stated hydrologic, biogeochemical, plant community, and faunal support/ habitat project targets and standards. The faunal support/habitat section will include a yearly survey for the steelhead by an NMFS-approved biologist and a yearly survey for the California red-legged frog by a FWS-approved biologist.

F. NEPA ENVIRONMENTAL ASSESSMENT

The upstream portion of the project is being studied by the U.S. Army Corps of Engineers, under the Section 206 Continuing Authorities Program (CAP) for the environmental restoration of San Pedro Creek at the Capistrano Street Bridge site.

Upstream USACE 206 Program Restoration Project

The failed fish ladder at the Capistrano Bridge will be removed and replaced with a step-pool fish passage system. It will extend from the downstream sill of the bridge, and extend approximately 550 ft upstream of the Bridge and 1340 ft downstream of the bridge within the City's canal reserve. Additionally, the bridge will be reinforced to provide long-term structural integrity. These tasks are being accomplished with the U.S. Army Corps of Engineers as a partner with the City of Pacifica, under the Section 206 CAP environmental restoration authority. The 206 restoration project is expected to begin construction in spring 2004

Specifically, the 206 project will replace the temporary weir with a permanent structure that will both benefit the steelhead populations in the creek and protect the integrity of the adjacent houses. First, the bridge will be reinforced by injecting concrete at the base of the existing structure to shore up the bulk footings. Second, the existing concrete/fish ladder structure will be removed and then replaced with a custom-designed, natural-appearing, step-pool fish passage system to allow migration through the reach. Third, the existing slopes adjacent to the bridge will be regraded and reinforced where necessary with "dirty riprap" (riprap with soil) that will be planted with the native plant species (e.g., Arroyo willow [*Salix lasiolepis*], Red-stem dogwood [*Cornus sericea subsp. sericea*], etc.)

A secondary feature of the proposed project will be the additional restoration of the currently degraded riparian plant communities along approximately 1890 linear ft of the stream reach of the creek surrounding the bridge. Native plants typical of the central coast watersheds will be installed on both the north and south banks of San Pedro Creek at the fish passage site. Planting stock collected from the watershed for the restoration of Lower San Pedro Creek will be donated by the City for this planting effort.

Description of Construction Associated With the Plan to Restore Longitudinal Connectivity in San Pedro Creek at the Capistrano Bridge in the 206 Project

1. Operational Improvements to Capistrano Bridge

With respect to the structural stability of the Capistrano Street Bridge, the bridge will be primarily reinforced by burying the footings as a result of raising the bottom elevation of the stream channel. If necessary, additional reinforcement may be accomplished by injecting

4. Exclusion of Reptiles and Amphibians from Work Area

Perimeter fencing will be installed before any grading occurs on the site. The fencing will be designed to U.S. Fish and Wildlife Service specifications to preclude all reptiles and amphibians from entering the work area. The exclusion of these animals from the work area should eliminate direct mortality that may result from construction activities. In addition, prior to construction, the LCLA/City team, along with a qualified (i.e. FWS-approved) biologist will sweep the construction area to remove and relocate individual reptiles and amphibians to a FWS-approved receptor site.

5. Exclusion of Steelhead from the Construction Zone

As described above, steelhead will be excluded from the work area prior to construction. Prior to daily construction, a FWS/NMFS -approved biologist will survey the reach of creek under construction and remove any fish that may have entered the reach during the off-hours.

6. Riparian Restoration Design

The restoration design for the creek banks and adjacent riparian zone includes the planting of native species that will provide, within two growing seasons, significantly more shade over the reach where the fish passage system will be installed. This shade will serve to lower or maintain cool water temperatures that are in part, a consequence of the cool base flow in San Pedro Creek.

7. Sediment and Erosion Control

Appropriate Best Management Practices (BMPs) per the Stormwater Pollution Prevention Plan ("SWPPP") will be in place throughout the construction process to avoid and minimize any water quality degradation as a result of grading operation on the site. These BMPs are outlined in the Hydrological Responses section in Chapter III of this document. In addition, water quality monitoring will occur to help the City target problem areas on the site that require additional best management practices to avoid the discharge of poor quality storm water to jurisdictional waters/wetlands.

8. Bullfrog Control

It has been demonstrated that the bullfrog (*Rana catesbeiana*) populations have an adverse effect on the California red-legged frog (USFWS 2000). Currently, there have been no reports of bullfrogs at the project site, although given the large size of the watershed; they may exist within the drainage. The City has agreed to control bullfrogs to the extent possible throughout the City's waters/wetlands ecosystem restoration sites, including the San Pedro Creek Waters/Wetlands Ecosystem Restoration and Flood Control and the Calera Creek Wetland and Riparian Ecosystem Restoration sites.

9. Education

All workers for the project will be briefed on the environmentally sensitive nature of the project. The briefing will include specific instruction on the Central California Coast steelhead, the California red-legged frog and other protected species, with appropriate directions on avoiding impacts to all species, and on reporting any incidents, should they occur.

The California Department of Fish and Game is a responsible agency as it is responsible for protecting state species of special concern and will be issuing a Stream Alteration Agreement for work conducted in San Pedro Creek.

The U.S. National Marine Fisheries Service will permit activities that could take or result in impacts to habitat of the federally listed steelhead. The U.S. Fish and Wildlife Service will permit activities that could take or result in impacts to habitat of the federally listed California red-legged frog. The federal agencies will conduct their own environmental review through the Section 7 consultation process.

This document also serves as an Environmental Assessment under the National Environmental Policy Act (NEPA) and will be used by the U.S. Army Corps of Engineers (see Section F. below).

E. MITIGATION INCORPORATED INTO THE PROJECT

1. Construction Timing

Demolition of the existing fish ladder and its replacement by a fish passage system will necessitate by-passing the creek throughout the length of the project. Thus a temporary creek by-pass will be constructed at the upstream extent of the project and continue to the downstream terminus. All construction will take place during the low water period specified by NMFS and DFG. The project currently is scheduled for construction from July through August 2004. Importantly, construction during the dry season will serve to limit erosion and subsequent sedimentation downstream of the construction reach.

2. San Pedro Creek By-Pass Construction and Maintenance

Because it is possible that juveniles and adults may become entrained in the by-pass culvert, a clear zone of intake to the pipe will be delineated, and a sump pump installed with a barrier to prevent intake of fish into the by-pass system. A similar sump pump/pipe/screen barrier will be installed at the downstream end of the reach, but in a reverse order. Prior to installation of the creek by-pass, the creek will be swept for fish and then blocked to prevent movement into the construction reach. The creek will be surveyed daily prior to initiation of construction activities to remove any fish that might attempt to utilize this reach of creek.

Additionally, the City will establish a contingency plan for fish entrainment. Contingencies measures, if necessary, will be directed by the observing wetland ecologist and/or fish biologist. In the event of a rare summer storm, a protocol for emergency response will be in place to ensure that storm water does not overwhelm the by-pass system. This protocol is listed in the Hydrological Section of this document, in Chapter III.

3. Step-Pool Complex

The overall goal of the project is to remove a barrier to fish passage within San Pedro Creek. As such, the project is one that specifically addresses limits to the viability of an endangered fish run and therefore, the project itself represents a long-term conservation measure.

Achieving the project standards will allow unrestricted movement through the reach by the Central California Coast ESU, as well as provide habitat for species typical to riparian zones on the Central California Coast, including the federally threatened California red-legged frog (*Rana aurora draytonii*).

San Pedro Creek Restoration

The project includes the restoration of the currently degraded riparian plant communities along approximately 1,890 linear ft of the stream reach of the creek surrounding the bridge. Restoration activities will start approximately 1,340 ft downstream of the 40 ft wide Capistrano Street Bridge and continue approximately 550 ft upstream of the bridge. The City holds a 50 ft easement in this reach, and as such, has unimpeded access to work in the creek. Native plants typical of the central coast watersheds will be installed on both the north and south banks of San Pedro Creek at the fish passage site. Planting stock will be collected from within the watershed .

Additionally, the downstream pool at the Capistrano Bridge now holds considerable amounts of urban refuse, most notably small pieces of concrete, rebar, and other miscellaneous reasonably immobile debris. All of this will be removed by the contractor implementing the project during the project construction.

1. Planting Plan

Non-native weeds and escaped ornamentals that have become established along the creek banks will be removed. Existing slopes within the project site will be regraded and reinforced where necessary with "dirty riprap" (riprap with soil) that will be planted with the native plant species (*e.g.*, Arroyo willow [*Salix lasiolepis*], Red-stem dogwood [*Cornus sericea* subsp. *sericea*], *etc.*) to resemble a natural and undisturbed creek of California's Central Coast.

The composition of native plant communities to be planted onsite is based on reference wetlands found along the Central California Coast (LCLA 1996). Plant community types to be installed have been derived from communities with ecologically similar habitats, and are based on the relative abundance of each species in the reference waters/wetlands. Individual plants in each community will be planted in polygons or areas marked in the field according to the draft planting plan. The existing environmental conditions will be modified according to previous sections, to provide ideal growing conditions that are similar to those at reference wetland ecosystems.

A mosaic of native plant species typical of Central California Coast riverine ecosystems will be planted in a series of plant community types. The three plant communities to be planted on the restoration site include: (1) Palustrine scrub-shrub community along the riparian corridor that is dominated by willows, (2) Palustrine forest plant community along the riparian corridor that is dominated by alder and willow, and (3) Palustrine emergent that is dominated exclusively by rushes and sedges and forbs and ferns.

D. INTENDED USES OF INITIAL STUDY

The City of Pacifica is the Lead Agency for this project and will use the Initial Study to determine potential environmental impacts resulting from the proposed project. The analysis of potential environmental impacts is based on the Initial Study Checklist.

Achieving these project standards will have the overall effect of a modest increase in the restored reach's ability to store both surface and subsurface water. This will be accomplished primarily by the removal of the concrete culvert.

b. Biogeochemistry

Based upon the reference standards for the Central California Coast (LCLA 1996), the LCLA design team has set the following project target for the restoration of the biogeochemical functioning: increase water residence / contact time within the riparian zone of San Pedro Creek up and down stream of the Capistrano Bridge. The following biogeochemistry project standards will be used to guide the final design and to attain the project target: (1) lay back side slopes and plant with palustrine scrub-shrub and emergent vegetation, (2) remove 669 ft long concrete culvert upstream of the Capistrano Bridge, and (3) install native plants species on the site with tree/sapling stem density = 241 to 403 stems/acre.

Achieving the project standards will have the overall effect of increasing slight microtopographic roughness through slope rugosity, as well as increasing significantly vegetative roughness. Increase in roughness will slow water as it moves through the restoration area. Slowing water movement through the site will allow more sediment (and elements and compounds sorbed to sediment particles) to settle out in the restoration area.

c. Plant Community

The plant community project target is to restore a self-sustaining native riparian forest and scrub shrub community within the project site. Based upon the reference standards for the Central California Coast (LCLA 1996), the LCLA design team has set the following project standards to attain the project target: (1) tree cover greater than 59% cover of native tree species, (2) shrub cover greater than 21% cover of native shrub species, (3) 70% or more survivorship of planted stock, and (4) 75% or more of dominant plant species in each strata are native. Achieving the project standards will result in the development of native plant communities that closely resemble reference standard conditions in riparian zones on the Central California Coast (LCLA 1996).

Seven plant community types are designed for the fish passage restoration site. These include: (1) Palustrine scrub-shrub community along the riparian corridor, dominated primarily by Arroyo and Sitka willows (*Salix lasiolepis* and *S. sitchensis*, respectively), with Red alder (*Alnus rubra*) also present; (2) Palustrine scrub shrub found primarily along the stream terraces, dominated primarily by Arroyo willow; (3) Palustrine scrub shrub community type planted along the steeper side slopes, dominated primarily by Arroyo and Sitka willows; (4) Palustrine forest along the riparian corridor, dominated by Red alder and Yellow willow (*S. lucida* subsp. *lasiandra*); (5) Palustrine forest dominated only by Red alder; (6) Palustrine emergent (persistent) planted along the creek margin, dominated by rushes and sedge (e.g., *Scirpus microcarpus*); and (7) Palustrine emergent (persistent) along the slopes dominated by rushes (*e.g., Juncus patens*) that tolerate relatively drier site conditions.

d. Faunal Support/Habitat

The faunal support/habitat project targets are to restore longitudinal connectivity to the main stem of San Pedro Creek at the Capistrano Bridge crossing and to restore dense vegetation to the riparian corridor along the project reach. The project standards are (1) remove the abrupt and prohibitive changes in the channel that prevent movement through the reach, (2) plant community structure is mixed with both trees and shrubs, and (3) leaf litter coverage is between 50 and 100%.

2. Agriculture Resources

Environmental Setting

The City of Pacifica is primarily an urban community and the land surrounding the project parcel is primarily residential in character. The Pacifica General Plan does not identify any farmlands of statewide significance near the project site, thus no agricultural resource will be impacted by the project.

Will the proposed project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? *(Source #: 9)*

No Impact. The project site is in the Linda Mar District of Pacifica and is designated for residential land uses in the City's General Plan Land Use Element and Zoning Ordinance. The project site does not comprise farmland nor is it located adjacent to farmland. The proposed project would not directly remove any acreage from agricultural production. There will be no impacts to farmland resources as a result of the proposed Capistrano Bridge upgrade and San Pedro Creek Fish Ladder and Stream Restoration.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract? *(Source #s: 9,10)*

No Impact. The project site is located within a residential area and it will not conflict with nor affect any land that has been zoned for agricultural use or is currently under Williamson Act contracts.

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? *(Source #s: 9,13)*

No Impact. The project will not involve other changes in the existing environment which could result in the conversion of farmland to non-agricultural use.

3. Air Quality

Environmental Setting

The Bay Area Air Quality Management District (BAAQMD) regulates air quality in Pacifica. The BAAQMD monitors and enforces District, State of California and Federal air quality standards. There are no major stationary air pollutant sources or major sources of odors adjacent to this site in Pacifica. Automobile use is the primary source of air pollutant emissions in the community.

The Bay Area is in attainment for all national pollutant standards set forth in the federal Clean Air Act with the exception of ozone. In 1998, the US EPA designated the Bay Area as "non-attainment" for the national 1-hour ozone standard. The ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The region also