

SECTION ONE:

INTRODUCTION

1.1 GOAL AND OBJECTIVES

Goal

The goal of this project is to assist the California Department of Transportation (Caltrans) and California Department of Fish and Game (DFG) to design and permit preemptive road corridor fixes that are biologically sensitive for areas along the creek side where failure has already begun or where it is imminent. In this way, the project will help improve the effectiveness and reduce the cost of road maintenance, while enhancing the coastal stream environment and the recovery of anadromous salmonids.

Objectives

The objectives of the project are to:

- 1) Review existing information on the physical and biological conditions of the watershed,
- 2) Collect and interpret new data pertinent to designing sustainable and ecologically sensitive, road maintenance projects,
- 3) Work with public groups to help them understand the project and to gain access to the creek, and
- 4) Strengthen the working relationship and trust between Caltrans, DFG, and the local community.

Limitations

Although the information would be valuable to Caltrans and DFG, the following were expressly beyond the scope of this project:

- 1) Assessing the effectiveness of existing or potential in-channel modifications and structures,
- 2) Documenting the conditions and impacts of the many culverts draining into the creek,
- 3) Undertaking the detailed sediment budget needed to identify the source of fine sediment and its fate in the riparian system, or
- 4) Analyzing the water chemistry to determine the extent and type of contaminant and the sources.

Disclaimer

The contents of this report reflect the views and perspectives of the authors who are responsible for the facts and accuracy of the data. The contents do not necessarily reflect the official views or policies of the agencies of the State of California who sponsored this work: the Department of Transportation (Caltrans) and the Department of Fish and Game (DFG). This report does not constitute a standard, specification, or regulation.

The State of California and its agencies do not endorse products of manufacturers. Trade or manufacturer's names appear where they are considered to be essential in the context of the subject under discussion.

1.2 LOCATION

The La Honda Creek watershed is located in the western Santa Cruz Mountains of the Coast Ranges in San Mateo County, California (Figure 1-1). The watershed occupies an area of 31.8 km² (12.3 mi²), extending southward from State Highway 35 (Skyline Drive) to San Gregorio Creek near the town of La Honda which lies approximately 19 km (11.8 mi) from the Pacific Ocean (Figure 1-2). State Highway 84 traverses the La Honda Creek watershed. The highway runs south from State Highway 35 (Skyline Drive) alongside La Honda Creek throughout the study area. Just south of the town of La Honda, it turns west, connecting with U.S. Highway 1 at San Gregorio Beach.

The study area covers 5.0 km (3.1 mi) of the La Honda Creek channel between Weeks Creek to the north and its confluence with San Gregorio Creek to the south. The area is located in Sections 23, 14, 11, and 2, T. 7 S., R. 4 W on the La Honda 7.5-minute USGS Quadrangle, and lies between latitude 37° 18' 35" and 37° 20' 48" North, and longitude 122° 16' 05" and 122° 16' 40" West.

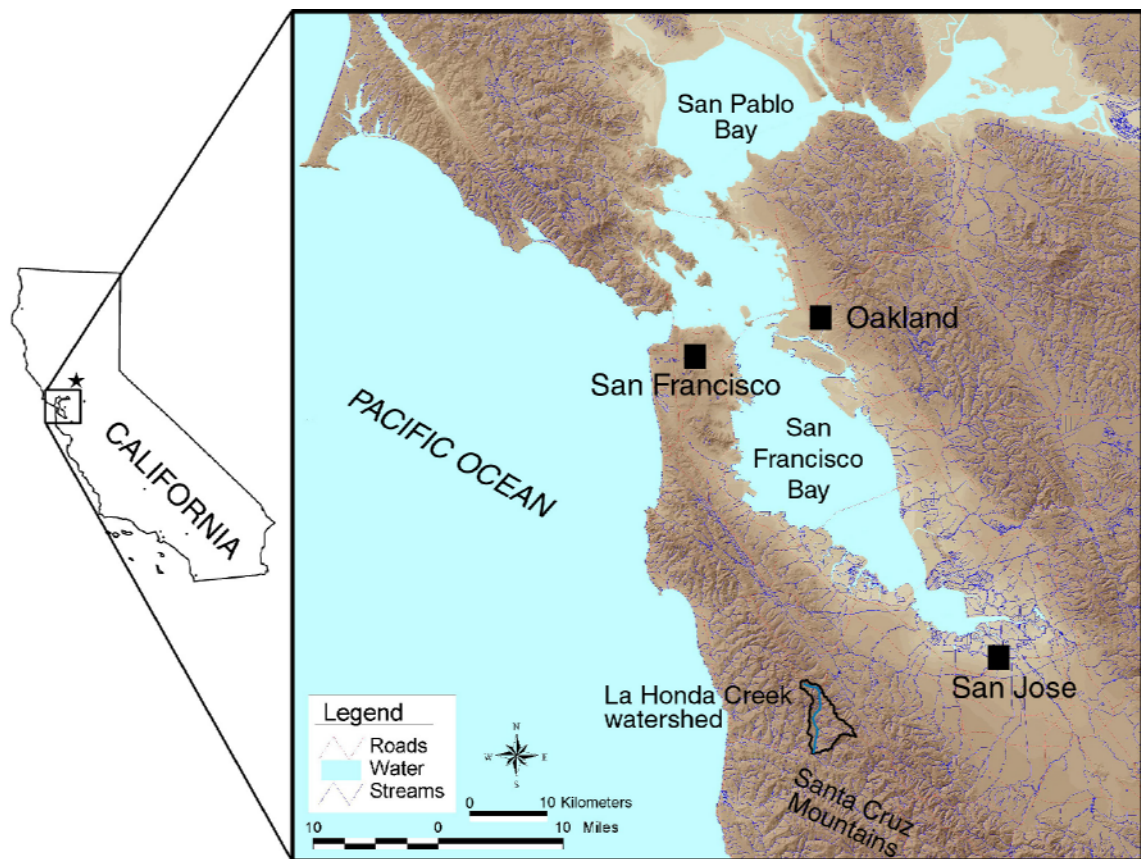


Figure 1-1. Location of the La Honda Creek watershed, San Mateo County, California.

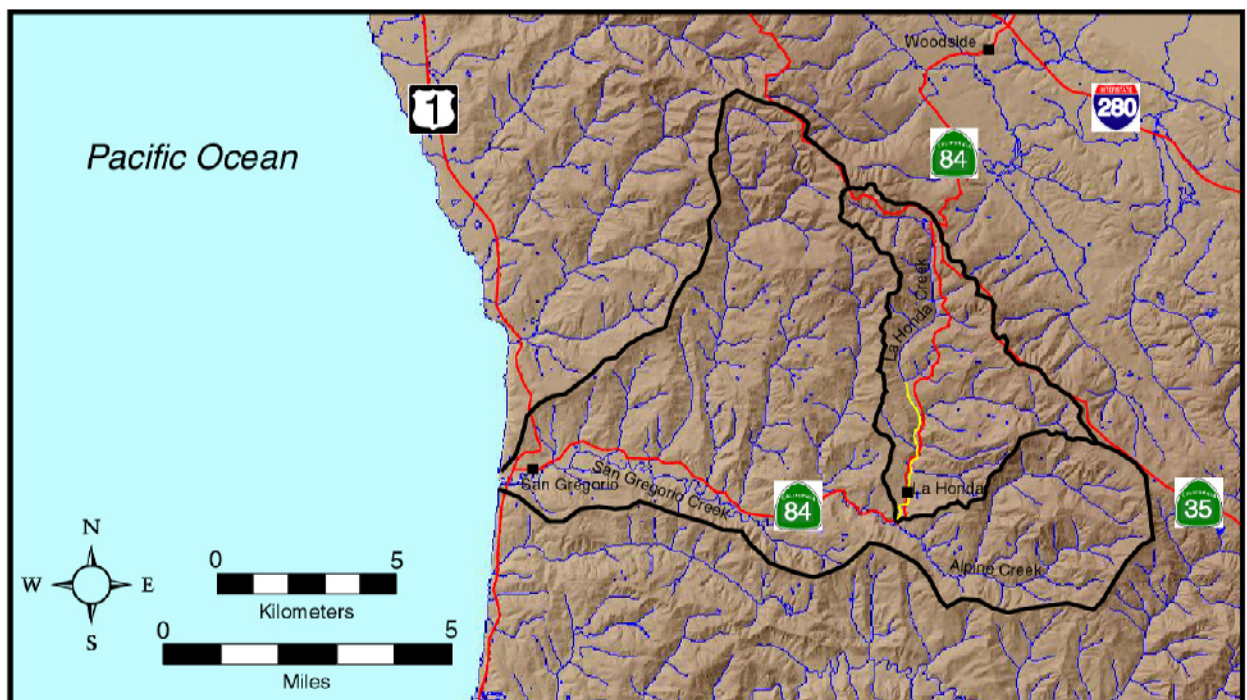


Figure 1-2. Map of the San Gregorio and La Honda watersheds. Watershed boundaries are shown in heavy black lines, highways are shown in red, and the study area of La Honda Creek is highlighted in yellow.

Aerial Photography

Aerial photographs of this area are very useful in mapping landslides and understanding hillslope processes. However, because of the dense riparian canopy, photographs are much less useful in understanding fluvial processes.

The first aerial photographs of the area were taken in 1931 by Teledyne Geotronics. Subsequent photographs have been taken approximately every 10 years or less (listed in Wieczorek, 1982), with the most recent set flown by the WAC Corporation in March 2000 (color, stereo, 1:24,000) (Table 1-1).

Table 1-1. Aerial photography taken over the La Honda Creek watershed.

Date flown	Company	Scale	Format	Availability
1931	Teledyne Geotronics	1:18,000	B&W	
1941	Teledyne Geotronics	1:25,000	B&W	
1943	Aero Service Corp. for USDA	1:20,000	B&W stereo	Partial coverage-UCB Library
1956	USDA	1:20,000	B&W	
1960	USGS	1:30,000	B&W	
1960	US Air Force	1:60,000	B&W stereo	UCB Library
1963	USDA	1:20,000	B&W	
1968	USGS	1:30,000	B&W	
1968	Mark Hurd Aerial Surveys	1:169,000	B&W	UCB Library
1973	Cartwright Aerial Surveys	1:14,500	Not cited	
1975	Murray-McCormick, Inc.	1:6,000	Not cited	
1977	Real Estate Data, Inc.	1:6,000, 1:12,000	B&W	UCB Library
2000	WAC Corporation	1:24,000	Color stereo	UCB Library

1.3 LOCAL COMMUNITY ORGANIZATIONS

A number of relevant local community organizations including San Gregorio Environmental Resource Center, Midpeninsula Regional Open Space District, La Honda Cuesta Guild, La Honda Volunteer Fire Brigade, and the La Honda Community Church, Coastside Habitat Coalition, Sierra Club Loma Prieta Chapter, and Peninsula Open Space Trust have a vested interest in maintaining the quality of the environment and other local resources. Although each of these organizations has specific objectives that reflect its membership, they all are oriented toward reducing environmental degradation while attending to the needs and concerns of the local community.

The community organization most involved with this study was the San Gregorio Environmental Resource Center (SGERC)--a 501(c) 3 non-profit organization that works to preserve and protect the habitat for endangered species of the Santa Cruz Mountains bioregion, focusing on the San Mateo County coast. SGERC was founded in 1988 to

provide environmental educational opportunities to school age children but has expanded since then to include a number of programs working with members of the community of all ages. They hold local community meetings on a monthly or bi-monthly schedule depending on issues and ideas that need to be discussed. In addition to the educational objective, members of SGERC carry out environmental monitoring for creek health (water quality, discharge, species, habitat, and riparian quality), coordinate local restoration efforts, and work with other organizations to achieve common goals.

1.4 ACCESS TO PRIVATE PROPERTY

The importance of working with the community during this project cannot be overstated. The community is generally suspicious of agencies and scientific groups working in the La Honda Creek watershed. They are concerned that the data generated might be used to carry out projects they disagree with, or to enforce environmental laws that might cost them money or infringe on their livelihoods or lifestyles.

SFEI and CSUF met with Catherine Swatland of SGERC to discuss community concerns and the project's objectives, data to be collected, and scheduling. Working with a local activist like Catherine was extremely important in establishing communication with the local community. SFEI worked progressively with Catherine to help the community understand the project. This involved: 1) developing a one-page project description handout, 2) developing a form giving permission to access private property, 3) presenting the project at a monthly meeting, 4) following up with landowners who had further questions, and 5) attending subsequent meetings to provide the local community with updates on progress.

Access to private property was gained gradually. Although it took three months working with Catherine and the local community before we had sufficient access to collect the necessary data, we were ultimately granted access to about 85% of the study area (Figure 1-3). Without their cooperation, we would have been limited to Caltrans or public right-of-ways, which cover less than 1% of the area (Figure 1-3).

1.5 LONG TERM, AGENCY-COMMUNITY RELATIONSHIPS

The access gained for the period of this study does not assume that permission will be granted in the future. The La Honda community is very sensitive to the activities of Caltrans and other agencies. Considering that extensive areas of the watershed are privately owned and that some of the landowners are skeptical of maintenance activities on Highway 84, it is essential that Caltrans try to maintain good relationships and open communication with local, public groups.

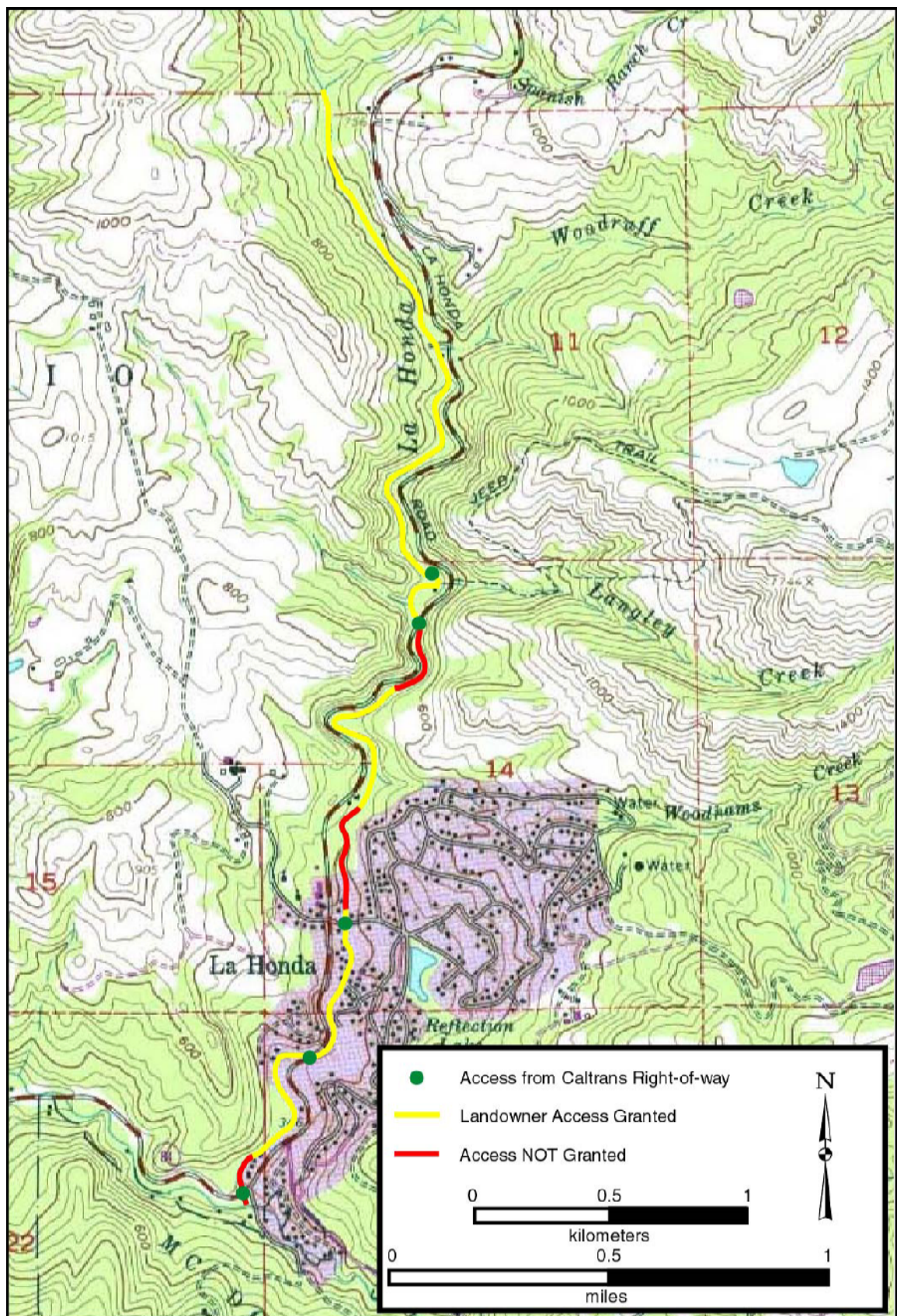


Figure 1-3. Creek access in the La Honda Creek study area.

Making this report available to the public will help the local community understand how La Honda Creek functions and the complex interactions between the creek and Highway 84. As well, the report can be a valuable resource for other agencies such as the San Francisco Regional Water Quality Control Board that are charged with managing the creek from a regulatory perspective.