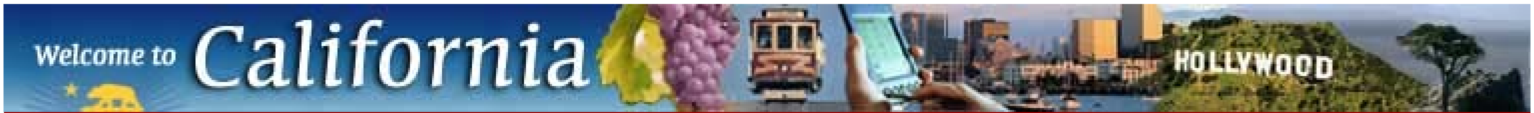
EXHIBIT 4: NOD AND MND

Notice of Determination
and
Mitigated Negative Declaration
for the
Rodeo Grounds Berm Removal and Restoration Project



Rodeo Grounds Berm Removal and Restoration Project

SCH Number: 2006011040

Type: NOD

Project Description

The project is intended to restore the natural floodplain, creek channel, and sediment transport systems at the southern end of Topanga Creek, ~ 2,500 feet upstream from the Pacific Ocean. The project consists of the removal of a berm that was installed by the former tenants of the Rodeo Grounds homes. The project grading will affect 1.8 acres of berm and 0.01 acre of delineated wetlands. An additional presently disturbed 12.4 acres will benefit from the removal of some of the exotic vegetation associated with the former residences as well as removal of the berm itself. Removal of the berm will restore over 12 acres of floodplain, allow natural reestablishment of natural creek hydrology and directly benefit endangered steelhead trout.

Project Lead Agency

Parks and Recreation, Department of

Contact Information

Primary Contact:
Suzanne Goode
California Department of Parks and Recreation
(818) 860-0364
1925 Las Virgenes Road
Calabasas
CA, 91302

Project Location

County: Los Angeles
City:
Region:
Cross Streets: Topanga Canyon Boulevard and Pacific Coast Highway
Parcel No: 4448-003-904
Township:
Range:
Section:
Base:
Other Location Info: Topanga State Park

Determinations

This is to advise that the ☒ Lead Agency ☐ Responsible Agency California Department of Parks and Recreation has approved the project described above on 12/19/2006 and has made the following determinations regarding the project described above.

1. The project ☐ will ☒ will not have a significant effect on the environment.

2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

3. Mitigation measures ☒ were ☐ were not made a condition of the approval of the project.

4. A Statement of Overriding Considerations ☐ was ☒ was not adopted for this project.

5. Findings ☒ were ☐ were not made pursuant to the provisions of CEQA.

Final EIR Available at: California Department of Parks and Recreation

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Date Received: 12/20/2006

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

NOTICE OF DETERMINATION

TO: State Clearinghouse
Office of Planning and Research
1400 Tenth Street, Room 222
P.O. Box 3044
Sacramento, California 95812-3044

FROM: Department of Parks and Recreation
1416 Ninth Street
P.O. Box 942896
Sacramento, California 94296-0001

SUBJECT: Filing of the Notice of Determination in compliance with Section 21108 of the Public Resources Code.

STATE CLEARINGHOUSE NUMBER: 2006011040
PROJECT TITLE: The Rodeo Grounds Berm Removal and Restoration Project
CONTACT PERSON: Suzanne Goode **PHONE NO.:** (818) 880-0364
1925 Las Virgenes Road
Calabasas, California, 91302

PROJECT LOCATION: Topanga State Park, Los Angeles County

PROJECT DESCRIPTION: The Rodeo Grounds Berm Removal and Restoration Project is intended to restore the natural floodplain, creek channel and sediment transport system at the southern end of Topanga Creek, approximately 2,500 feet upstream from the Pacific Ocean. The project consists of the removal of a berm that was installed by the former tenants of the Rodeo Grounds homes. The project grading will affect 1.8 acres of berm and 0.01 acres of delineated wetlands. An additional presently disturbed 12.4 acres will benefit from the removal of some of the exotic vegetation associated with the former residences as well as removal of the berm itself. Removal of the berm will restore over 12 acres of floodplain, allow natural reestablishment of natural creek hydrology and directly benefit endangered steelhead trout.

This is to advise that the California Department of Parks and Recreation has approved the above project, and has made the following determinations regarding the above described project:

1. ☒ The project will not have a significant effect on the environment.
   ☐ The project will have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project, pursuant to the provisions of CEQA.
3. Mitigation measures ☒ were ☐ were not made a condition of the approval of the project.
4. A Mitigation reporting or monitoring plan ☒ was ☐ was not adopted for this project.
5. A Statement of Overriding Considerations ☐ was ☒ was not adopted for this project.
6. Findings ☒ were ☐ were not made pursuant to the provisions of CEQA.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at the California Department of Parks and Recreation, Angeles District, located at 1925 Las Virgenes Road, Calabasas, California, 91302.

Theodore Jackson, Jr.
Deputy Director
Park Operations

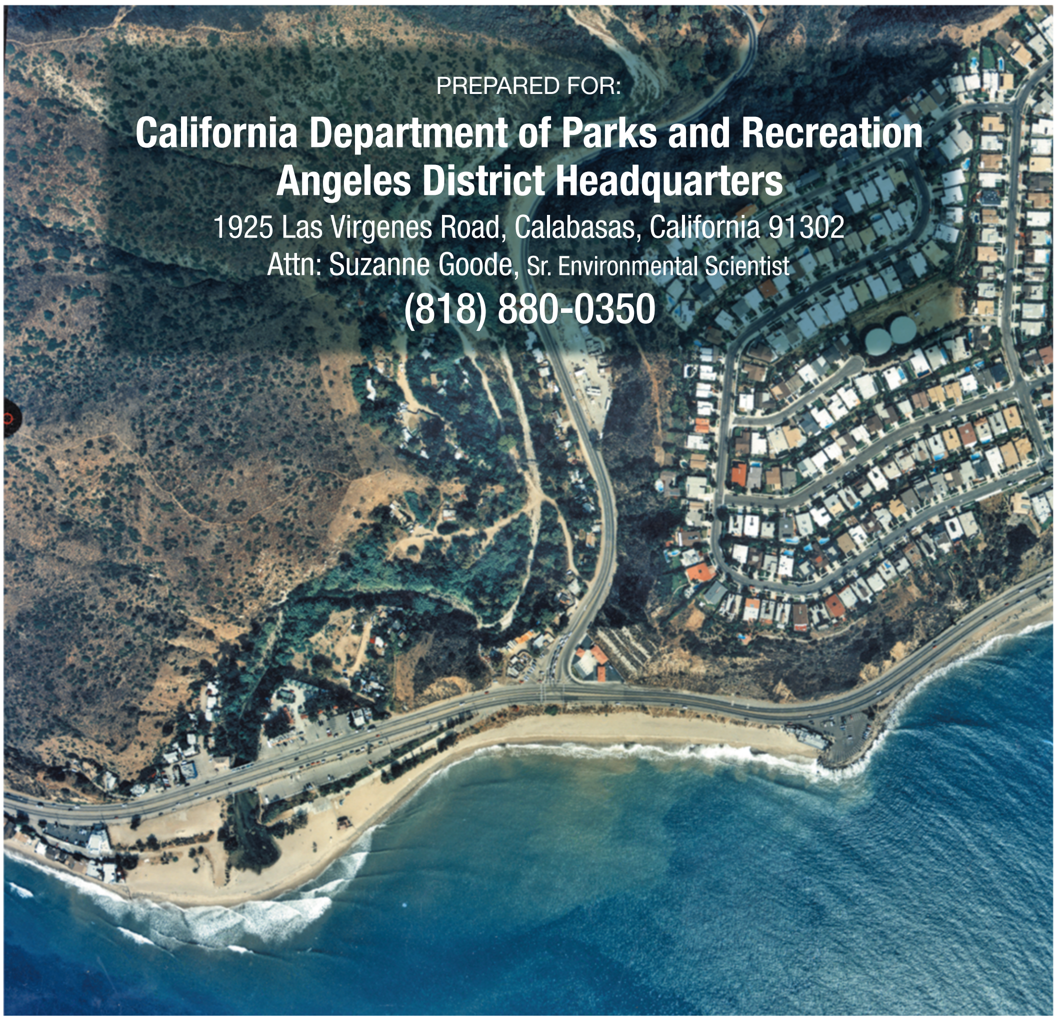
Date

DPR 507 (Rev. 9/2004)(Word 9/20/2004)

MITIGATED NEGATIVE DECLARATION

The Rodeo Grounds Berm

Removal and Restoration Project



PREPARED FOR:

California Department of Parks and Recreation
Angeles District Headquarters

1925 Las Virgenes Road, Calabasas, California 91302

Attn: Suzanne Goode, Sr. Environmental Scientist

(818) 880-0350

PREPARED BY:

Envicom Corporation

28328 Agoura Road, Agoura Hills, California 91301

September 2006

THE RODEO GROUNDS BERM
REMOVAL AND RESTORATION PROJECT
MITIGATED NEGATIVE DECLARATION

Prepared For:

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
ANGELES DISTRICT HEADQUARTERS
1925 Las Virgenes Road
Calabasas, California 91302
Contact: Suzanne Goode, Sr. Environmental Scientist
(818) 880-0350 Ext. 113

Prepared By:

ENVICOM CORPORATION
28328 Agoura Road
Agoura Hills, California 91301

September 2006

MITIGATED NEGATIVE DECLARATION

PROJECT: **RODEO GROUNDS BERM REMOVAL AND RESTORATION PROJECT**

LEAD AGENCY: California Department of Parks and Recreation

AVAILABILITY OF DOCUMENTS: The Initial Study for this Mitigated Negative Declaration is available for review at:

- Angeles District Headquarters, California Department of Parks & Recreation
  1925 Las Virgenes Road
  Calabasas, CA. 91302
- Los Angeles County Malibu Public Library
  23519 Civic Center Way
  Malibu, CA. 90265
- Pacific Palisades Library
  861 Alma Real Drive
  Pacific Palisades, CA. 90272
- Resource Conservation District of the Santa Monica Mountains
  122 North Topanga Canyon Boulevard
  Topanga, California 90290

PROJECT DESCRIPTION:
The Rodeo Grounds Berm Removal and Restoration Project is proposed by the California Department of Parks and Recreation. The project is intended to restore the natural floodplain, creek channel, and sediment transport systems at the southern end of Topanga Creek, approximately 2,500 feet upstream from the Pacific Ocean. The project consists of the removal of a berm that was installed by the former tenants of the Rodeo Grounds homes in order to divert flood waters from Topanga Creek and protect the residences.

The project's total area of direct impact encompasses an estimated 1.81 acres, which includes the 80,000 square foot (1.8 acres) of berm and 0.01 acres of delineated wetlands. These acreages are intended as maximum areas of impact for CEQA analysis purposes. As the purpose of the project is to benefit Topanga Creek, these impacts are temporary, and the restoration effort is designed to reduce the affected areas of waters and wetlands to the most minimal amount necessary to accomplish the berm removal and restoration process.

An additional presently disturbed 12.4 acres will benefit from the removal of some of the exotic vegetation associated with the former residences as well as removal of the berm itself. This area has been disturbed since the 1920's and has little present habitat value. Thus, removal of the berm will result in restoration of over 12 acres of floodplain, allow natural re-adjustment of the creek channel and restore natural sediment transport regimes. These actions are anticipated to result in direct benefits to endangered steelhead trout that will be able to then access 3.3 miles of suitable habitat that is seasonally restricted due to the sub-surface flows associated with the berm.

A copy of the Initial Study is attached. Questions or comments regarding this Initial Study/Mitigated Negative Declaration may be addressed to:

Suzanne Goode
California Department of Parks & Recreation
1925 Las Virgenes Road
Calabasas, CA. 91302

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently reviewed and analyzed the Initial Study and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.

Ron P. Sch

Ron P. Schafer
District Superintendent

9/21/06
Date

Suzanne Goode

Suzanne Goode
Environmental Coordinator

9-21-06
Date

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	☐ Agricultural 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	☒ None

DETERMINATION

On the basis of this initial evaluation:

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

I find that, although the original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. 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** or its functional equivalent will be prepared. ☐

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the impacts not sufficiently addressed in previous documents. ☐

I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required. ☐

Suzanne Goode — 9-21-06

Suzanne Goode
Environmental Coordinator

Date

TABLES

FIGURES

I. PROJECT DESCRIPTION

Introduction

The Rodeo Grounds Berm Removal and Restoration Project is proposed by the California Department of Parks and Recreation (CDPR). The project is intended to restore the natural floodplain, creek channel, and sediment transport systems at the southern end of Topanga Creek, approximately 2,500 feet upstream from the Pacific Ocean, as shown in **Figure 1, Regional Location Map**. The project consists of the removal of a berm that was installed by the former tenants of the Rodeo Grounds homes in order to divert flood waters from Topanga Creek and protect the residences.

The project's total area of direct impact encompasses an estimated 1.81 acres, which includes the 80,000 square foot (1.8 acres) of berm and 0.01 acres of delineated wetlands. These acreages are intended as maximum areas of impact for CEQA analysis purposes. As the purpose of the project is to benefit Topanga Creek, these impacts are temporary, and the restoration effort is designed to reduce the affected areas of waters and wetlands to the most minimal amount necessary to accomplish the berm removal and restoration process.

As part of a related project not covered by this Mitigated Negative Declaration, an additional presently disturbed 12.4 acres adjacent to the berm will benefit from the removal of all the former residences. This area has been disturbed since the 1920's and has little present habitat value. Thus, removal of the berm will result in restoration of over 12 acres of floodplain (the berm plus the adjacent disturbed habitat), allow natural re-adjustment of the creek channel and restore natural sediment transport regimes. These actions are anticipated to result in direct benefits to endangered steelhead trout which will be able to then access 3.3 miles of suitable habitat that is now seasonally restricted due to the sub-surface flows associated with the berm. **Figure 2, Project Impact Areas**, illustrates the entire project area, including the 1.81 acres that will be directly impacted by the project.

Project Location

The Rodeo Berm Removal and Restoration Project is located in an unincorporated portion of Los Angeles County in the watershed in Topanga State Park north of Pacific Coast Highway (PCH) and east of the Tuna Canyon Significant Ecological Area. Specifically, the project site is in and around Topanga Creek, which is adjacent to (and on the west side of) Topanga Canyon Boulevard, just north of PCH, which is also designated as California State Highway 1 (refer to Figures 1 and 2). Access to the Rodeo Grounds area is currently provided regionally by PCH and Topanga Canyon Boulevard and locally by Rodeo Grounds Road, which is an unpaved roadway currently traversing the streambed and the berm. The proposed project site lies within the Eastern 1/2 of the Northwestern 1/4 of a projection of fractional Section 32 located in Township 1 North and Range 16 West, extending into the Rancho/Land Grant of Boca de Santa Monica, as referenced from the San Bernardino Baseline depicted on the Topanga, California, 7.5' x 7.5' United States Geological Survey (USGS) topographic map sheet.

Surrounding Land Uses

Land uses in the vicinity of the site include the Topanga Canyon Boulevard roadway, single family residences (and assorted fences, dirt roadways and outbuildings), commercial uses (along PCH) and open space. The residences and commercial uses are now within state ownership, and are planned for removal, excepting historic buildings, which will be retained and maintained as part of the state parklands. Open space in the surrounding area includes other portions of the state ownership, as well as vacant hillsides north of PCH (including Topanga State Park to the north and east and the Tuna Canyon Significant Ecological Area to the west), as well as beaches to the south.

RODEO GROUNDS BERM REMOVAL AND RESTORATION PROJECT

ENVICOM CORPORATION

Regional Location Map

MILES 0 4 8

FIGURE 1

Source: Resource Conservation District of the Santa Monica Mountains. Aerial Photograph, I.K. Curtis, 1997.

ENVICOM CORPORATION

RODEO GROUNDS BERM REMOVAL AND RESTORATION PROJECT

Project Impact Areas

FEET 0 200 400

FIGURE 2

Project Background and Context

Construction of the berm occurred without permits, so the details of its construction are not fully known. Based upon the current project geotechnical investigations and general observations, the berm is believed to have been constructed in at least two stages. The current Rodeo Grounds Berm was constructed in 1969 after a major flood event to protect residences living immediately downstream of Topanga Creek. Then, additional fill material (road spoils from throughout the watershed) was placed on the berm after another flood event in 1980, raising the berm higher. According to local residents, the sources of at least a portion of the berm fill material, asphalt, may have been imported from Topanga Canyon Boulevard and a Lincoln Boulevard road demolition/expansion project in Santa Monica.

In August 2001, the California Department of Parks and Recreation acquired 1,659 acres adjacent to the southwest boundary of Topanga State Park. This property was acquired in order to "protect and preserve this ecologically important area as open space and recreation land. It will open to public access an area that contains preserved grasslands, meadows, wetlands, creeks, live oaks, cliffs and canyons that will provide extensive recreational opportunities for the Los Angeles region".[1] Since the project area was incorporated into Topanga State Park in 2001, the Rodeo Grounds structures have been slated for removal, with some already removed. As determined by legal agreement, the tenants of the area known as Rodeo Grounds were vacated by February 2006. Following departure of the tenants, California State Parks is responsible for removing the residences. It is anticipated that all the structures currently protected by the berm will be removed prior to the start of this project. Environmental review for these demolitions occurred in a document released by the California Department of Parks and Recreation, Southern Service Center on July 5, 2002 [The Topanga State Park: Lower Topanga Canyon Acquisition Final Interim Management Plan and Environmental Impact Report, State Clearinghouse Number (SCH #) 2001121028].

The Rodeo Grounds Berm Removal and Restoration Project MND was first circulated in January 2006 for public review and comment. Relevant issues raised in the comment letters have been addressed herein and are also attached as **Appendix A**. The MND is being recirculated in order to adequately address all CEQA-related requirements.

General Environmental Setting

The project site is located within the Lower Topanga Canyon Acquisition Final Interim Management Plan area, shown in **Figure 3, Topanga State Park Acquisition Area**. Topanga Creek is the dominant natural feature of the property as it runs over two miles through the heart of the acquisition. A riparian corridor of varying widths and gradients parallels both sides of Topanga Creek, and is composed of sycamore woodlands, arroyo willow woodlands, and white alder woodlands. The southernmost end of this corridor is the flattest and widest, and includes 2.2 acres of remnant estuary and lagoon habitat, as well as riparian woodlands and fresh water marshes. The majority of the acquisition property (approximately 1,659 acres) consists of steep slopes covered by chaparral. Several species listed as endangered or threatened occur, or have the potential to occur, within the newly acquired lands. Native Americans were present in the canyon and surrounding areas in prehistoric times, particularly at the creek's coastal interface. Historic developments began during the early 1900s. A few existing structures, mostly along Pacific Coast Highway (PCH), are considered historically significant. However, these structures lie outside the project area.

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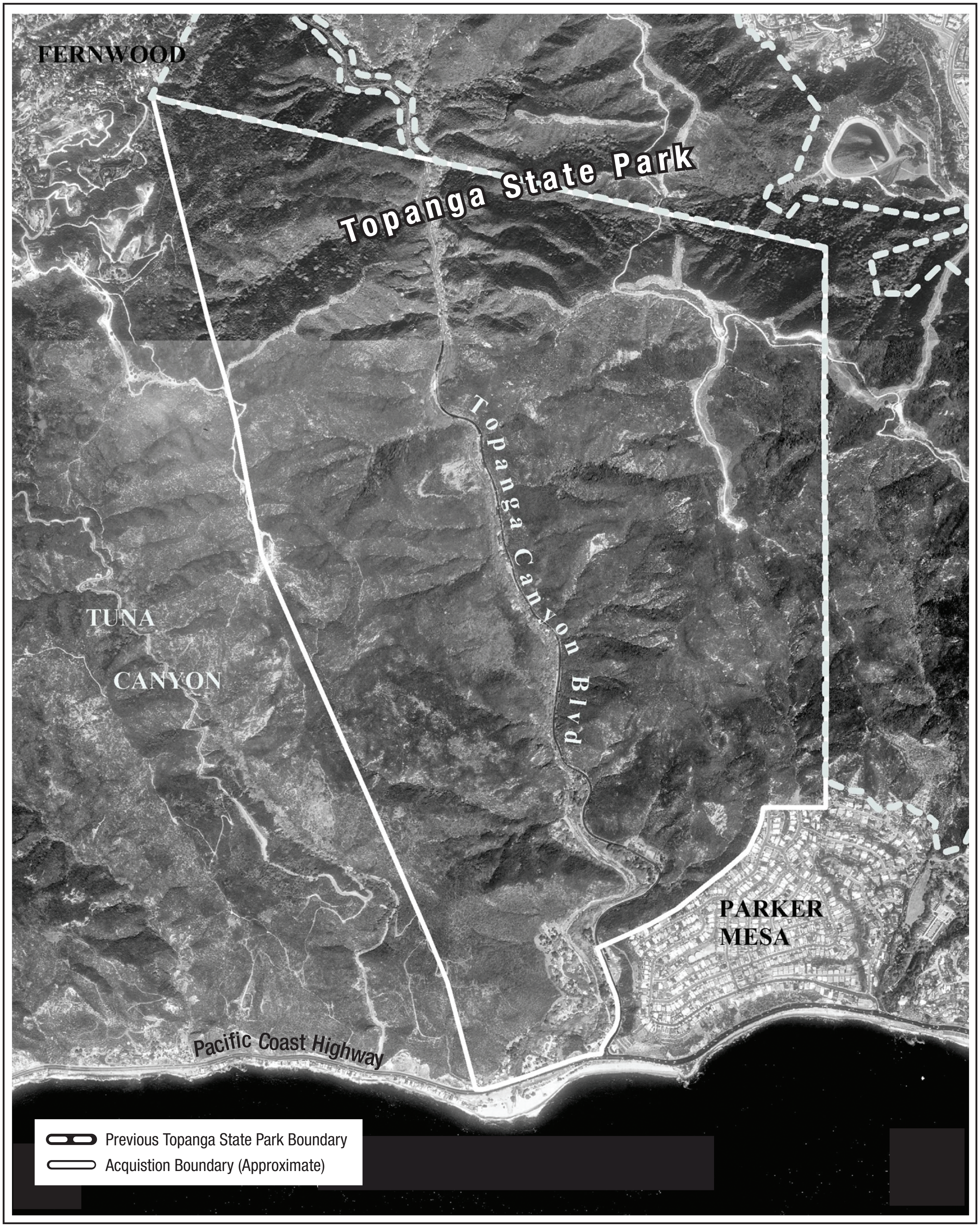
[1] Interim Management Plan EIR, SCH # 2001121028, 2002.



Source: California Department of Parks and Recreation

ENVICOM CORPORATION

Topanga State Park Acquisition Area

FIGURE 3

Project Characteristics

Rodeo Grounds Berm Removal

The berm on the western bank of Topanga Creek is trapezoidal in shape, measuring approximately 1,000 feet in length and varying in width between 40 to 100 feet. Total surface area of the Rodeo Grounds Berm is, approximately 80,000 square feet, with a height ranging from 12 to 14.5 feet. The estimated volume of the berm is 520,000 cubic feet (or 19,000 cubic yards), with a total weight of approximately 26,000 tons consisting of soils and other fill materials, such as asphalt, which will all be removed and disposed of with implementation of the project. The eastern bank of the berm is covered with concrete and boulders for erosion control. Preliminary soil testing indicates that an estimated 17,000 tons of the berm qualify as non-Resource Conservation and Recovery Act (RCRA) California hazardous waste, due to lead contamination. The remaining 9,000 tons of fill materials qualifies as non-hazardous material. Therefore, fill materials will likely be transported to and disposed of at different landfill facilities, because not all landfills accept contaminated, hazardous waste. The proposed area of restoration, prepared by GeoPentech, is shown in **Figure 4, Approximate Final Grade Map**.

Topanga Creek and Habitat Restoration

The planned restoration effort, which will follow the berm removal phase, will rely on natural restoration of the Creek alignment. Once the berm impediment is removed (along with removal of homes and other structures under a separate project), the Creek will be allowed to "right itself" to its former channel as defined by the remnant bank on the west side. Removal of exotic vegetation will restore the natural creek channel habitats, restore all disturbed acreage (including wetland/ riparian floodplain), allow removal of storm-generated sediment that has built up, and restore above-surface creek flow. Ultimately, the project is expected to provide summer rearing habitat and improve over-winter habitat and critical passage links for the endangered southern steelhead trout between the main stem of Topanga Creek and the ocean. Other terrestrial and aquatic wildlife will benefit, as well.

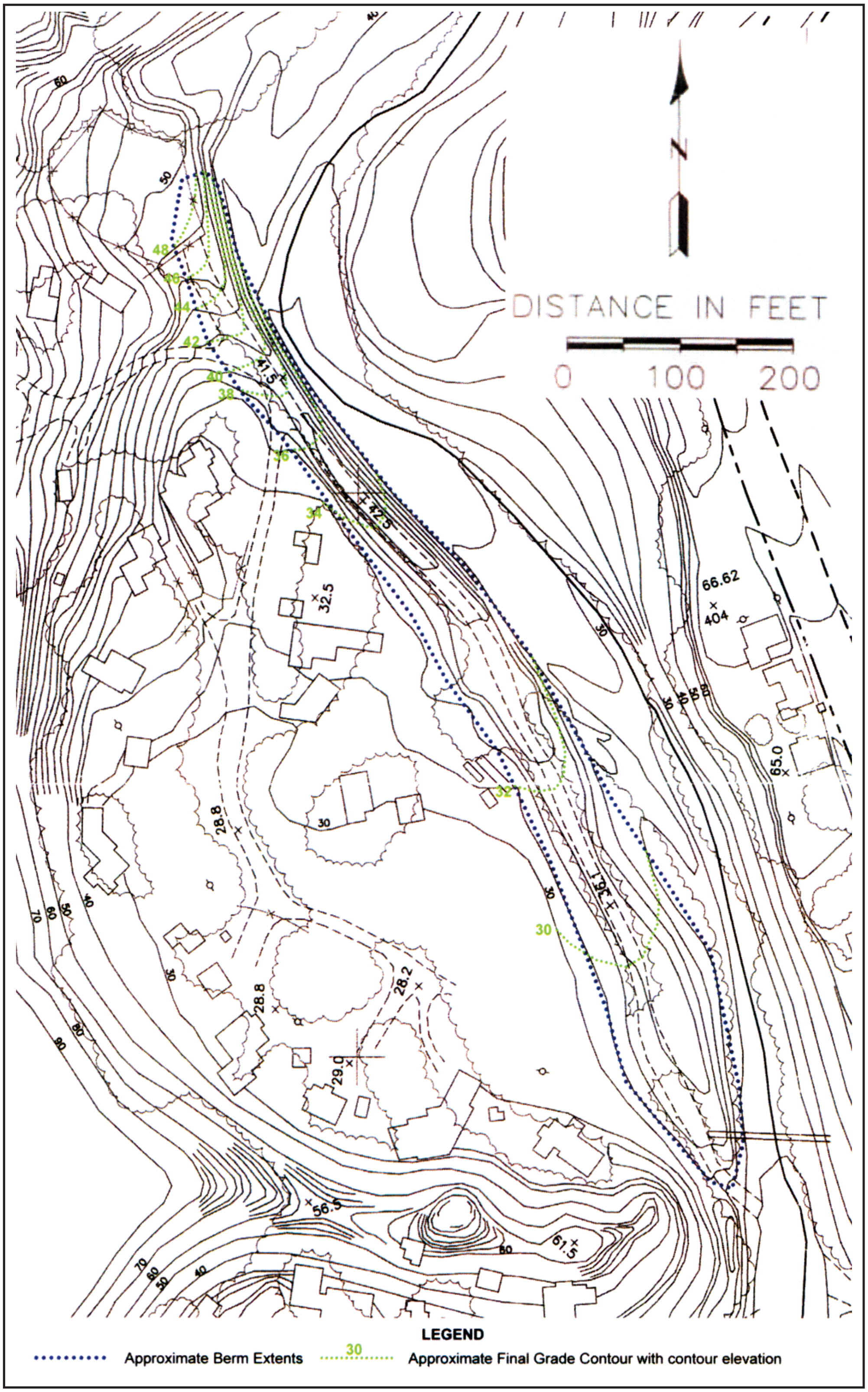
Other Aspects of the Project

The project does not include any hardscape or park facilities. Rather, its sole purpose is removing the berm and allowing for restoration of the natural environment in this location.

Project Goals and Objectives

The goals and objectives of the proposed Rodeo Berm Removal and Restoration Project are to:

1. Remove the lead contaminated constructed earthen berm at the Rodeo Grounds site (which diverts the natural flow of Topanga Creek), to allow for return of the site to a natural condition as the creek channel naturally adjusts itself following the fill removal.
2. Reduce unnatural Creek channelization allowing for natural dissipation of stream flow energy over a wider, more natural floodplain and reduce scour downstream.
3. Implement a restoration and revegetation plan for native trees and restore the natural creek geomorphology and hydrologic and hydraulic regimes.
4. Provide improved habitat for area wildlife on-site, including high quality habitat for the endangered southern steelhead trout.
5. Return a portion of the state ownership to natural conditions, which will enhance the overall environmental value of the property and improve the quality of the public's environmental experience (aesthetics, views).
6. Indirectly provide for educational opportunities pertaining to the creek restoration and the steelhead trout, as well as other aspects of the natural environment at the site, and in the surrounding area.



Source: GeoPentech, April 2005

Envicom Corporation

Approximate Final Grade Map

FEET 0 75 150

FIGURE 4

7. Continue responsible stewardship in the operation of Topanga State Park, protect the public and the site's natural resources from hazardous conditions (safety, environmental health, and access to natural parkland).

Purpose and Intended Uses of the MND

The Mitigated Negative Declaration is intended to satisfy the California Environmental Quality Act (CEQA) requirements for the project, which includes all project approvals and all actions that could result in a physical change to the environment. Project approvals include, but are not limited to the following:

- Army Corps of Engineers 404 Nationwide Permit No. 27
- California Coastal Commission Permit Approval
- California Department of Fish and Game 1600 Agreement
- Caltrans Transportation and Encroachment Permit Approval
- Regional Water Quality Control Board Approval

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers, except "No Impact", that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show that the impact does not apply to the project being evaluated (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on general or project-specific factors (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must consider the whole of the project-related effects, both direct and indirect, including off-site, cumulative, construction, and operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether that impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate when there is sufficient evidence that a substantial or potentially substantial adverse change may occur in any of the physical conditions within the area affected by the project that cannot be mitigated below a level of significance. If there are one or more "Potentially Significant Impact" entries, an Environmental Impact Report (EIR) is required.

4. A "Mitigated Negative Declaration" (Negative Declaration: Less Than Significant with Mitigation Incorporated) applies where the incorporation of mitigation measures, prior to declaration of project approval, has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact with Mitigation." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

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 (including a General Plan) or Negative Declaration [CCR, Guidelines for the Implementation of CEQA, § 15063(c)(3)(D)]. References to an earlier analysis should:

   a) Identify the earlier analysis and state where it is available for review.

   b) Indicate which effects from the environmental checklist were adequately analyzed in the earlier document, pursuant to applicable legal standards, and whether these effects were adequately addressed by mitigation measures included in that analysis.

   c) Describe the mitigation measures in this document that were incorporated or refined from the earlier document and indicate to what extent they address site-specific conditions for this project.

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

7. A source list should be appended to this document. Sources used or individuals contacted should be listed in the source list and cited in the discussion.

8. Explanation(s) of each issue should identify:

   a) the criteria or threshold, if any, used to evaluate the significance of the impact addressed by each question and

   b) the mitigation measures, if any, prescribed to reduce the impact below the level of significance.

II. ENVIRONMENTAL ANALYSIS

A. BACKGROUND INFORMATION

Project Title: Rodeo Berm Removal and Restoration Project **Project ID#**
PCA#

Contact Person: Suzanne Goode, Sr. Environmental Scientist **Telephone: (818) 880-0350 Ext. 113**

Address: California Department of Parks and Recreation, Angeles District
1925 Las Virgenes Road, Calabasas, California 91302

Location: Lower Topanga Canyon, Topanga State Park

Checklist Date: September 2006

Project Description: See Section I of this Document.

B. INITIAL STUDY CHECKLIST

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
1. AESTHETICS.				
ISSUES				
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?	☐	☐	☐	☒

COMMENTS

The project will result in restoration of Topanga Creek and the surrounding area within the project limits to a natural condition. The man-made berm will be removed and a revegetation program will remove native and non-native vegetation and re-establish native vegetation at the appropriate grade. The project site will thus be returned to a more scenic state. No structures, hardscape or lighting will be added. The project is consistent with other State Parks efforts to restore the lower Topanga area, including removal of the existing homes and commercial structures on and adjacent to PCH and Topanga Canyon Road (excluding historical buildings, which will be maintained as a part of the Park; see Section 5, Cultural Resources, below). Pacific Coast Highway (PCH) is a State-designated California Scenic Route. However, the project site is not currently visible from PCH, and if it were, the project would result in a positive impact to scenic resources.

MITIGATION

No mitigation measures are needed or required.

2. AGRICULTURAL 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 Department of Conservation as an optional model for use in assessing impacts on agricultural and farmland. Would the project:

ISSUES	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

COMMENTS

The project site is not in use for farming or any other form of agriculture, nor has it been used for such purposes in the last twenty years. The project parcel is not enrolled within a Williamson Act contract (California Land Conservation Act of 1965) and is not under any zoning requirements that would restrict the use to agriculture.

MITIGATION

No mitigation measures are necessary.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact

3. AIR QUALITY.

ISSUES

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations. Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan or regulation?	☐	☐	☐	☒
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 in 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.g., children, the elderly, individuals with compromised respiratory or immune systems)?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

The following analysis is based on the Air Quality Analysis prepared for the proposed project by Giroux and Associates, dated August 31, 2006 (included as **Appendix B**).

COMMENTS

Air quality is evaluated and regulated locally by the South Coast Air Quality Management District (SCAQMD), which prepares the Air Quality Management Plan (AQMP) and provides guidance for air quality assessment for projects in the South Coast Air Basin, a region that includes all of Los Angeles and parts of surrounding counties. SCAQMD regulations incorporate and therefore administrate air quality regulations promulgated by the U.S. Environmental Protection Agency (EPA), the Federal Clean Air Act (CAA), the California EPA and the California CAA (CCAA).

The South Coast Air Basin has been designated by the U.S. EPA as a non-attainment area for ozone (O_3), carbon monoxide (CO), and particulate matter (PM-10). The CO standard is currently met in the basin, and re-designation to "attainment/maintenance" is anticipated shortly. Due to the variations in both the regional meteorology and in area-wide differences in levels of air pollution emissions, patterns of non-attainment have strong spatial and temporal differences. The number and severity of violations of clean air standards along Santa Monica Bay are much less than in other parts of the basin. The project site is located less than a mile from the coast, and is therefore within an area of localized, cleaner air as compared to downtown Los Angeles or the inland valleys. Nevertheless, the standards apply to all areas of the Basin, as pollutants generated by individual projects incrementally add to cumulative regional air quality conditions.

Air Quality Impact Significance Standards

Standards of Significance

Many air quality impacts that result from the dispersed mobile sources, i.e., the dominant pollution generators in the basin, often occur hours later and miles away after photochemical processes have converted the primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally immeasurably small. The SCAQMD has therefore developed suggested significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. Any projects in the South Coast Air Basin (SCAB) with daily emissions that exceed any of the following thresholds listed in **Table 3-1** are recommended by the SCAQMD to be considered individually and cumulatively significant.

Table 3-1
SCAQMD Emissions Significance Thresholds
(pounds/day)

Pollutant	Construction	Operations
ROG	75	55
NOx	100	55
CO	550	550
PM-10	150	150
SOx	150	150
Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev., as cited by Giroux and Associates, August 31, 2006.		

Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the Federal or State ambient air quality standards by either violating or contributing to an existing or projected air quality violation.
- Project could result in population increases within the regional statistical area, which would be in excess of that projected in the AQMP.
- Project could generate vehicle trips that cause a CO hot spot.
- Project might have the potential to create or be subjected to objectionable odors.
- Project could have hazardous materials on site and could result in an accidental release of air toxic emissions.
- Project could emit an air toxic contaminant regulated by District rules or that is on a federal or State air toxic list.
- Project could involve disposal of hazardous waste.
- Project could be occupied by sensitive receptors near a facility that emits air toxics or near CO hot spots.
- Project could emit carcinogenic air contaminants that could pose a cancer risk.

The proposed project will entail the removal of soil, some of which may be lead-contaminated. However, the lead particles are heavy and are not prone to becoming airborne. Except for exhaust from excavation equipment and on-road trucks, toxic air contaminants are not expected to be a project issue. There are no post-removal air quality impacts. Any potential air quality impacts would thus derive mainly from "criteria" air pollutants during removal operations with the listed significance thresholds.

Short Term Air Quality Construction Impacts

Grading and earth movement produce air pollutants from two sources. One is from the earthen materials themselves, smaller particles of which become airborne (also termed "fugitive dust"), and the second is from the emissions from construction equipment and vehicles. Air pollutants will be generated on a short-term basis from these sources during the berm deconstruction phase and to a much lesser degree during the short-term restoration phase.

Fugitive Dust (PM-10)

Dust (PM-10) emissions will be generated from on-site excavation and truck loading, from export of fill material via haul trucks, and from off-site placement and compaction of the exported material. For purposes of this analysis, it has been assumed that the average daily excavation and subsequent disposal area totals two acres on any given day. A maximum activity day was assumed to move 1,000 cubic yards, requiring 50 daily truck-loads of earth hauling (50 daily roundtrips).

In the absence of definitive data on silt content, soil moisture, wind speeds, etc., the "default" PM-10 emissions data from the SCAQMD CEQA Air Quality Handbook were used to calculate daily PM-10 emissions. These factors, from Table A9-9 of the handbook, are 10.0 pounds/day/acre for grading and fill placement and 0.031 pounds/ton for truck loading/unloading. IN addition, daily PM-10 emissions are estimated as 20.0 pounds/day (2 acres x 10 pounds/acre) for excavation and disposal and 40.3 pounds/day (1,300 tons x 0.031 pounds/ton) for truck loading/dumping, resulting in 60.3 pounds/day.

PM-10 emissions will be less than the 150 pounds per day significance threshold. However, the non-attainment status of the air basin for PM-10, the rules of the SCAQMD (Rule 403), and the presence of dust-sensitive land uses near the project site all require that best available control measures (BACM's) for dust be used during berm removal. The matrix of recommended dust control measures is included in the mitigation section below.

Construction Equipment Exhaust

The disposal site will vary with the level of contamination of the excavated material. "Clean" material will be trucked to a landfill in Los Angeles County. Contaminated material will require disposal at a hazardous waste repository in the San Joaquin Valley or at desert locations in Riverside or Imperial Counties. The distance of daily hauling and associated air pollution emissions depends upon the currently unknown split between clean versus contaminated materials.

On-site equipment to extract the material and load the trucks was assumed to use a rubber-tired dozer and a rubber tired loader. At the unloading end, the material was assumed to be pushed by a dozer and compacted with a compactor. A water truck will provide dust suppression at both travel ends. A split of two thirds/one third was assumed between clean and contaminated dirt, respectively. A 30-mile roundtrip distance for clean fill disposal was assumed. A 40-mile one-way distance was assumed for contaminated fill disposal before the truck leaves the air basin. The total daily disposal travel distance was estimated as 990 miles (33 loads x 30 miles/roundtrip) for clean fill and 1,366 miles (17 loads x 80 miles/round trip) for contaminated fill, for a total of 2,350 miles.

Peak daily air pollution emissions were calculated by combining emission factors from the SCAQMD construction emissions web-site (off-road), and the EMFAC2002 computer model (on-road), and comparing the resulting emissions to the applicable SCAQMD significance thresholds.

Peak daily project related emissions, shown in **Table 3-2**, will be below the SCAQMD CEQA significance threshold for all pollutants. NOx emissions will be near the threshold and could exceed the threshold if the bulk of the excavated material is contaminated and must be hauled for longer distances. Both because of the non-attainment status of the air basin and the small margin of NOx safety, reasonably available control measures for NOx emissions are recommended.

Table 3-2
Maximum Project Construction Activity Emissions (pounds/day)

Construction Sources	Emissions (pounds/day)				
	CO	NOx	PM-10	SOx	ROG
Dozers – 6 hours	6.6	17.5	0.7	2.7	1.3
Loader – 4 hours	1.7	4.7	0.3	0.9	0.4
Compactor 2 hours	1.4	14.0	0.2	0.6	0.4
Water trucks - 10 hours	1.7	0.3	<1	<1	0.2
Total Equipment	11.4	26.5	1.2	4.2	2.3
Employee Commute – 5,000 mi.	7.0	0.7	<1	<1	0.7
Fugitive Dust - 2 acres	-	-	2.0	-	-
Haul Trucks – 2,350 mi.	52.5	69.3	1.9	-	6.0
Project Total	70.9	96.5	3.1	4.2	9.0
SCAQMD Threshold	550.	100.	150.	150.	75.
Exceeds (?)	No	No	No	No	No
Source: The SCAQMD Web-site (CEQA) for off-road equipment and the California ARB MVE17G for on-road sources, as cited by Giroux and Associates (August 31, 2006).					

Long Term Air Quality Impacts

The project is a berm removal and restoration project, which will not generate air pollutants, thus it will have no long-term air quality impacts.

Other Impacts

The project will not generate any substantial odors. The project would not conflict with the Air Quality Management Plan in that it is not a development project, nor will it adversely affect any sensitive receptors.

MITIGATION

No long-term mitigation measures are necessary. Project-related air pollution emissions during removal of the berm will not exceed SCAQMD CEQA thresholds, based upon reasonable assumptions of off-road equipment use and on-road hauling distances. NOx exhaust emissions may, however, approach the threshold. The non-attainment status of the air basin for photochemical smog and the proximity of pollution-sensitive uses near the project site, as well as the possibly small margin of safety for NOx, all suggest that an enhanced level of impact mitigation should be implemented. The recommended matrix of dust and exhaust emissions is as follows:

Fugitive Dust (PM-10)

AQ-1 Use low pollutant-emitting construction equipment where/when feasible.

AQ-2 Use oxidation catalyst equipped, diesel-powered equipment, if such equipment is economically available.

AQ-3 Water the construction area twice daily (preferably four times) to minimize fugitive dust.

AQ-4 Stabilize (for example, hydroseed) graded areas as quickly as possible to minimize dust.

AQ-5 Implement track-out control as follows:

- Apply chemical stabilizer or pave the last 100 feet of internal travel path within a construction site prior to public road entry.
- Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads.
- Remove any visible track-out into traveled public streets within 30 minutes of occurrence.
- Wet wash the construction access point at the end of each workday if any vehicle travel on unpaved surfaces has occurred.
- Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads.

AQ-6 Cover haul trucks or maintain at least 12 inches of freeboard to reduce blow off during hauling.

AQ-7 Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 mph.

AQ-8 Enforce a 15 mph speed limit on all unpaved surfaces at a construction site.

Equipment NOx Emissions

AQ-9 NOx emissions may temporarily approach the daily significance threshold. Any off-road equipment operating on the berm-removal site with engine power output exceeding 100 horse-power should be equipped with Tier 3-rated engines that limit combined NOx and ROG emissions to 3.0 grams per horsepower-hour of power output.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES.				
ISSUES				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the 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, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands, as defined by §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?	☐	☐	☐	☒

COMMENTS

According to the Rodeo Grounds Road Restoration and Revegetation Plan prepared by the California Department of Parks and Recreation, Angeles District (July 2006), and included in **Appendix C**, the project area consists of a mixture of remnant wetland species, disturbed riparian assemblages dominated by southern willow scrub, and coastal sage scrub on the perimeter, with non-native exotic landscape and escaped plant species surrounding the houses, which are currently being removed. Over 100 non-native trees ranging from large *Eucalyptus* to smaller fruit trees are present. Several large stands of giant reed (*Arundo donax*) are also present. In addition to the willow complex, several mature native trees, including sycamore, coast live oak, California walnut, toyon, Mexican elderberry and a single specimen of Fremont cottonwood are also present. While some of these trees are sufficiently isolated from the fill materials of the berm, others have grown on top of the berm, and they will need to be removed along with the fill materials. Lists of the vascular plants observed at the project site and of sensitive plant species, as well as bird species, present in the Topanga Canyon area are also included in **Appendix C**.

The project's total potential area of direct impact includes an estimated 1.81 acres, which consists of the 80,000 square foot (1.8 acres) berm and the 0.01 acres of delineated, but marginal, wetlands (see **Appendix C** for the project Wetland Delineation Survey). An additional presently disturbed 10.5 acres will benefit from the removal of the exotic vegetation associated with the berm and structures. This area has been disturbed since the 1920's and has little present habitat value. Thus, removal of the berm will result in restoration of over 12.4 acres of floodplain (the berm plus the disturbed adjacent habitat), allow natural re-adjustment of the creek channel and restore natural sediment transport regimes. These actions are anticipated to result in direct benefits to endangered steelhead trout who will be able to then access almost four miles of suitable habitat that is seasonally restricted due to the sub-surface flows associated with the berm.

The purpose of the project is to benefit Topanga Creek; any adverse project impacts are temporary, and the restoration effort is designed to reduce the affected area of waters and wetlands to the most minimal amount necessary to accomplish the berm removal and restoration process.

Removal of the Rodeo Grounds Berm will restore the natural stream channel and restore above surface creek flow of Topanga Creek to provide summer rearing habitat, as well as improve over-winter habitat and critical passage links for the endangered southern steelhead trout (*Oncorhynchus mykiss*) between the main stem of Topanga Creek and the Pacific Ocean. Additionally, it is anticipated that removal of the berm will allow natural storm flushing of accumulated sediments from upstream of the project area, restoring over 1,000 linear meters of creek connectivity that is critical for migrating adult and juvenile steelhead trout. The removal of these sediments should also result in a more natural diversity of geomorphologic habitat units, which should provide additional spawning and rearing habitat for fishes. A list of the sensitive wildlife species present in the Topanga Canyon area is included in **Appendix C**.

As stated in the Rodeo Grounds Berm Removal Project Oak Tree Report and Native Tree Preservation and Removal Plan prepared by the Resource Conservation District of the Santa Monica Mountains (July 2006), also included in **Appendix C**, in order to remove the fill materials of the Rodeo Grounds Berm and restore the floodplain and channel of Topanga Creek, it will be necessary to remove the following native trees that are growing into the berm:

- Approximately 30 willows (*Salix lasiolepis, S. laevigata)* of varying sizes;
- Two toyon (*Heteromeles arbutifolia*);
- One Mexican elderberry (*Sambucus mexicana*);
- One coast live oak (*Quercus agrifolia*), Tree No. 1;
- One heritage Fremont cottonwood (*Populus fremontii*), Tree No. 2; and
- One California walnut (*Juglans californica*), Tree No. 3.

Typically, trunks buried in fill become structurally compromised and fail once the surrounding fill is removed. Adventitious roots along the trunks would also be cut in order to remove the fill to original grade, further compromising the structural stability and health of the trees. Following removal of the berm, the trees would also be located within a restored floodplain and subject to potential creek channel adjustments and the force of storm flows. Both the California Coastal Commission and the California Department of Fish and Game will require mitigation for the loss of these native trees, which is provided below.

Due to their location on the lower edges of the berm, it appears possible to retain several mature sycamore trees (*Platanus racemosa*) including Tree Nos. 4, 5, 6, 7, 8 and 9. Careful excavation of the surrounding soil, supervised by a qualified certified arborist or resource biologist, is recommended in order to determine the distribution of roots and extent of the root ball that can be retained to provide structural stability. Since failure of the trees is a possibility once the soil environment is changed, mitigation for these trees is recommended below. It is noted that an additional 10.5 acres of berm-adjacent floodplain area will benefit from the removal of the exotic vegetation associated with the structures, which is a positive impact of the project. No mitigation measures are required for the 10.5-acre berm-adjacent floodplain area.

MITIGATION

BR-1 Mitigation for the trees that will be removed from the project site as a result of removal of the Rodeo Grounds Berm shall include:

BR-1a Tree No. 1, Coast Live Oak (*Quercus agrifolia*)
The loss of this tree shall be mitigated with planting a minimum of five one-gallon coast live oaks grown from locally collected acorns, and an additional ten acorns in tree tubes.

BR-1b Tree No. 2, Freemont Cottonwood (*Populus fremontii*)
Mitigation for this heritage size tree shall include planting a minimum of 15 cuttings propagated from the tree prior to its removal.

BR-1c Tree No. 3 California Walnut (*Juglans californica*)
The minimum replacement planting for this tree shall consist of three one-gallon trees, as well as ten nuts in tree tubes, which should be gathered from within the Topanga Creek Watershed.

BR-1d Willows (*Salix lasiolepis, S. laevigata, S. exigua*)
A minimum of 100 willow stakes cut from trees on-site shall be incorporated into the Revegetation Plan.

BR-1e Toyon and Mexican Elderberry (*Heteromeles arbutifolia* and *Sambucus mexicana*)
A minimum of ten toyon and ten Mexican elderberries shall be planted from seed material or cuttings harvested from within the Topanga Creek Watershed.

BR-2 In order to maximize the potential for retaining the mature sycamores (*Platenus recemosa*), Trees Nos. 4, 5, 6, 7, 8, and 9, the following measures are recommended:

BR-2a Excavation Technique

- An arborist or resource biologist shall be on site at all times to provide continuous guidance to the excavation crew.
- The area within the dripline plus an additional radius of 15 feet shall be delineated as the Root Protection Zone. All excavation within this zone shall occur under the direct supervision of a qualified arborist or resource biologist.
- Material shall first be removed with hand tools within a six-foot radius of the trunk to locate structural roots. Based on distribution of roots and trunk condition uncovered, the arborist can advise the crew if use of a bobcat or other excavation machine is possible without compromising the tree. If not, then excavation shall be confined to hand tools.
- If there is a question of tree stability once the fill material is removed, the arborist or resource biologist shall work with the CDPR ecologist to determine if the tree should be removed or retained and either allowed to fail under natural conditions or supported by bracing or cabling.

BR-2b Maintenance and Monitoring Plan

- A minimum of five years of maintenance shall be required, which includes quarterly visits from the arborist or resource biologist to monitor the structural integrity and overall condition of the trees.
- A minimum of five years of monitoring shall also be required, including but not limited to bi-annual photographic documentation, as well as documentation of structural and health condition.

BR-2c Mitigation Plan

- Should the sycamore trees fail, a contingent mitigation planting shall be incorporated into the Revegetation Plan for the site. A minimum of 15 one-gallon sycamore trees shall be planted. Use of locally derived plant materials is recommended.

BR-3 The proposed project shall incorporate the recommendations of the Rodeo Grounds Road Restoration and Revegetation Plan prepared by the California Department of Parks and Recreation, Angeles District (July 2006), regarding the revegetation of the upland/coastal sage scrub slope, restored floodplain, and berm footprint. The recommended species palette is included in **Table 4-1**, below.

Table 4-1
Species Palette for the Revegetation of the Rodeo Grounds Berm Project

Scientific Name	Common Name	Upland/ CSS	Floodplain	Berm Footprint
TREES				
Alnus rhombifolia	White Alder		X	X
Heteromeles arbutifolia	Toyon	X	X	
Juglans californica	CA Walnut	X	X	
Platanus racemosa	CA Sycamore		X	X
Populus f. fremontii	Fremont Cottonwood	X	X	X
Quercus agrifolia	Coast Live Oak	X	X	
Salix exigua	Narrow-leaf Willow		X	X
Salix laevigata	Red Willow		X	X
Salix lasiolepis	Arroyo Willow		X	X
Sambucus mexicana	Mexican Elderberry	X	X	
Umbellularia californica	California Bay	X	X	
SHRUBS				
Baccharis salicifolia	Mule Fat	X	X	X
Eriogonum cinereum	Ashyleaf Buckwheat	X		
Eriogonum fasciculatum foliolosum	CA Buckwheat	X	X	
Malosma laurina	Laurel Sumac	X	X	
Rhus integrifolia	Lemonadeberry	X	X	
Salvia mellifera	Black Sage	X	X	
HERBACEOUS PERRENIALS AND SUB-SHRUBS				
Encelia californica	CA Bush Sunflower	X	X	
Eriophyllum c. confertiflorum	Golden Yarrow	X	X	
Lotus scoparius	Deer Weed	X	X	
Lupinus succulentus	Arroyo Lupine	X	X	
Mimulus aurantiacus	Orange Bush Monkey Flower	X	X	
Oenothera elata hirsutissima	Evening Primrose	X	X	
GRASSES				
Elymus g. glaucus	Blue Wild Rye			X
Nassella pulchra	Purple Needlegrass	X	X	

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES.				
ISSUES				
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) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
d) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☒	☐	☐

COMMENTS

The potential for historic resources to exist at the project site was explored in the Cultural Resources Survey for the Topanga State Park: Lower Topanga Canyon Acquisition (July 2002). According to the report, California State Parks recognizes cultural resources based on their eligibility or potential eligibility for the National Register of Historic Places (NRHP) and/or the California Register of Historical Resources (CRHR). A resource must be demonstrated to be significant under one or more of the following criteria outlined in the National Park Service National Bulletin 15 in order to be recognized as historically or architecturally significant:

A: Events. The resource is associated with an event, or series of events that have made a significant contribution to the broad patterns of history.

B: People. The resource has an unequivocal association with the lives of people significant in the past.

C: Architecture. The resource embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.

D: Archaeology. The resource has yielded or may be likely to yield information important to history or prehistory.

A resource may qualify for the NRHP if it is 50 or more years old and significant within a historical context, meets the eligibility criteria, and has retained its integrity (assessed on location, design, setting, materials, workmanship, feeling, and association). Potential historical significance and subsequent eligibility for listing in the National Register of Lower Topanga Canyon structures have been identified for the Topanga Ranch Motel, the Wood Family Cottage, and Wylie's Bait Shop. Wylie's Bait Shop has been identified as potentially historically significant under Criterion A, while the Topanga Ranch Motel and the Wood Family Cottage are both identified as potentially significant as historical resources under Criteria A and C. As all three structures lie outside of the project boundaries, the project is not expected to cause a substantial adverse change in their historical significance.

According to the Topanga State Park Archaeological Test Trenching Report for the Rodeo Grounds Berm Removal Project (October 4, 2005), prepared by Marla Mealey, archaeologist for California State Parks (**Appendix D**), no archaeological sites or features are known or recorded within the project area. One site, CA-LAN-133, is located off-site at the mouth of Topanga Creek, and Lower Topanga Creek has been designated as sacred lands by the California Native American Heritage Commission. Archaeological monitoring, including four borehole excavations in the berm, occurred in February of 2005. No cultural resources were observed during these excavations (Sampson, Michael, 2005. Archaeological Monitoring of Four Borings within a 20th Century Berm at Lower Topanga Canyon). In addition, seven trench locations were located throughout the Rodeo Grounds to determine the presence or absence of buried cultural deposits and tested on October 4, 2005. Recovered materials included modern and recent historic glass, construction debris, window glass, fragments of mirrors, and pieces of porcelain and modern pottery. According to the archaeological test trenching report, it appears that the areas of the Rodeo Grounds that may be impacted by removal of the berm are entirely within the historic creek bed, and that there is no potential for cultural resources to be damaged or destroyed by the project's proposed activity.

Nevertheless, the report finds that the potential still exists for cultural resources to be located on terraces along the edges of the drainage or on the small natural ridgeline that extends out into the drainage from the west. Any future subsurface work that occurs in those areas will be tested and/or monitored by an archaeologist and Native American representative.

As the project involves excavation or disturbance of only 1) the top surface of site soils, and 2) previously disturbed soils brought from off-site, namely the berm, the project would not likely disturb any significant paleontological resources. Because the imported berm soil no longer lies in its natural state, were any resources found within it, they would no longer be situated in their original context and would not be considered significant resources. Nevertheless, the archaeologist hired shall have sufficient expertise for identification of significant paleontological resources, so that they may halt activity and call for appropriate handling of such resources, in the unlikely event that any are found.

MITIGATION

CR-1 As the potential still exists for cultural resources to be located in the project area, any future subsurface work that occurs on terraces along the edges of the Topanga Creek drainage (or on the small natural ridgeline that extends out into the drainage from the west) should be monitored, and if necessary tested, by an archaeologist and Native American representative.

CR-2 The archaeological monitor hired shall have sufficient expertise for identification of significant paleontological resources, so that he or she may halt activity and call for appropriate handling and disposition of such resources, in the unlikely event that any are found.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
6. GEOLOGY AND SOILS.				
ISSUES				
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area, or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☒

ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) 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 (1997), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems, where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature (see Cultural Resources, above)?	☐	☒	☐	☐

COMMENTS

The project is located along the southern flanks of the central Santa Monica Mountains, which is a relatively young, rugged coastal range defining the southern margin of the Transverse Ranges, an east-west trending geological province also encompassing the major Santa Ynez, San Gabriel, and San Bernardino mountain ranges. The Transverse Ranges were deformed by the relative movement of the North American and Pacific Plates and are characterized by compressional folding and thrust and reverse faulting, most notably related to a large flexure in the San Andreas Fault north of the Transverse Ranges. Major faults and fault zones associated with the Transverse Ranges include the San Andreas and San Jacinto faults to the north and east, and the Malibu Coast Fault, Santa Monica Fault, and Raymond Fault. While the effects from these fault activities could range from very mild to severe ground motions, the project involves the removal of a berm and therefore will not expose people or structures to potential adverse effects resulting from earthquake fault rupture, seismic ground shaking, liquefaction, or landslides.

According to the Topanga Creek Watershed Erosion and Sediment Delivery Study (Orme, et. al. 2002), roads are sources of accelerated erosion and sediment yield from cut banks and resulting berms. Therefore, during rainfall or runoff events, sediment moves to roadside ditches and culverts and then on to stream channels. The report states that berms in Lower Topanga Canyon are potentially a large source of sediment. In addition, dirt roads such as that located on top of the Rodeo Berm, especially when designed poorly and lacking maintenance, are also associated with serious problems of erosion and sediment yield. As a result, removal of the berm and restoration of the creek bed is likely to reduce erosion and decrease the sediment yield to Topanga Creek. Any dirt roads or trails provided in the future for public recreational use will be properly designed and maintained by the California Department of Parks and Recreation.

The proposed project is removing a berm for which there is no formal record of the engineering or construction processes that produced it. Therefore, it is likely an unstable structure, not built in accordance with any Federal, State, or local regulations (i.e., may include unstable or expansive soils). However, the project itself will remove the unapproved berm and restore the project site to a natural condition. The project site is part of a State Park and would not be utilized for any habitable structures where geologic concerns would be an issue. Thus, neither the berm removal process nor the end condition of the site would result in on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse that would present any risk to life or property.

The berm deconstruction phase will follow a prescribed Berm Removal Plan, a general version of which is contained in the Rodeo Grounds Berm Removal Soil Characterization Report prepared for by the project by GeoPentech in April 2005 (**Appendix E**). In addition, a remediation and waste removal firm, Clean Harbors, has presented additional recommendations regarding the removal process.

MITIGATION

Although no mitigation is required for project impacts to geology and soils, it is recommended that:

GEO-1 The proposed project must be implemented in accordance with a Berm Removal Plan [a general sample of which is discussed in the Rodeo Grounds Berm Removal Soil Characterization Report prepared for the project by GeoPentech in April 2005 (**Appendix E**)], as well as in accordance with the recommendations of berm deconstruction and hauling contractor(s), such as Clean Harbors (**Appendix E**), or similar studies and recommendations by similarly qualified firms.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
7. HAZARDS AND HAZARDOUS MATERIALS.				
ISSUES				
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/or accident conditions involving the release of hazardous materials, substances, or waste 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 §65962.5, and, as a result, create a significant hazard to the public or environment?	☐	☐	☐	☒
e) Be 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? If so, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) Be located in the vicinity of a private airstrip? If so, 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?	☐	☐	☐	☒

h) Expose people or structures to a significant risk of loss, injury, or death from wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

COMMENTS

According to the Rodeo Grounds Berm Removal Soil Characterization Report prepared for by the project by GeoPentech in April 2005, the laboratory testing program performed for the project site included chemical tests for waste characterization of the berm fill soil for disposal options. These chemical tests were performed in general accordance with the applicable procedures of the Environmental Protection Agency. The compounds detected using the Total Threshold Limit Concentration (TTLC) procedures were below the TTLC hazardous waste criteria, where designated. With the exception of lead, these concentrations were also below ten times the Soluble Threshold Limit Concentration (STLC) and below 20 times the Toxic Characteristic Leaching Procedure (TCLP) hazardous waste criteria. The TCLP is a Federal method, and the STLC is a California method with stricter criteria regarding hazardous waste classification. Lead was detected in TTLC concentrations between 95.9 milligrams per kilogram (mg/kg) and 163 mg/kg in samples COMP(B2-CA-1B, B2-CA-2B), COMP(B3-CA-2B, B4-CA-2B, B6-CA-2B), B5-CA-1B, and COMP(B6-CA-3, B6-CA-4). As these lead concentrations were above ten times the STLC and above 20 times the TCLP, these samples were tested for lead using STLC and TCLP procedures. Lead was not detected in concentrations above 0.100 milligrams per liter (mg/L) (detection limit) using TCLP procedures. However, using STLC procedures, lead was detected in concentrations above hazardous waste levels (5 mg/L) in samples COMP(B2-CA-1B, B2-CA-2B), COMP(B3-CA-2B, B4-CA-2B, B6-CA-2B), and B5-CA-1B with a maximum STLC lead concentration of 6.17 mg/L. As lead was detected below Federal (TCLP) hazardous waste levels and above California (STLC) hazardous waste levels, this soil is considered non-Resource Conservation and Recovery Act (non-RCRA), or California hazardous waste, for disposal purposes.

It is possible that the lead contamination is related to the source of the berm fill, which is assumed to be partially originated from road demolitions and from soil adjacent to roads. It is likely that the fill materials were contaminated with lead before they were imported for berm construction, with the major source of lead in and around roads being the previous application of lead in gasoline. According to the Rodeo Grounds Berm Removal Soil Characterization Report, it appears that the hazardous waste lead contamination is laterally continuous across the majority of the berm, with the contamination located within the upper approximately eight feet of the berm.

Removal of the trapezoidal berm, which has a surface area of 80,000 square feet from toe to toe, a volume of approximately 520,000 cubic feet, and an estimated weight of 26,000 tons (100 pounds per cubic foot), involves the transport of approximately 17,000 tons of hazardous materials (lead-contaminated as described above) and 9,000 tons of non-hazardous materials to landfills. It is likely that the fill classified as non-hazardous will be accepted at the municipal landfill facilities operated by the Los Angeles County Sanitation District, such as the Puente Hills, or Shoal Canyon landfills. Other available facilities include the Simi Hills or Calabasas landfills. The non-RCRA, hazardous, waste must be disposed of at a facility that will accept this type of waste. The appropriate facilities identified in the Rodeo Grounds Berm Removal Soil Characterization Report include the Mecca II landfill in Riverside County, California; the Kettleman Hills Facility in Kings County, California; and the Clean Harbors Landfill in Buttonwillow, California. Without regulation, transport and disposal of both types of material could result in significant impacts. However, all transport and disposal shall occur in accordance with Federal, State and local regulations governing such activities and therefore is not expected to pose a significant hazard to the public (Questions 7a, 7b, and 7c, above). In addition, the RCD/State Parks will be contracting with a licensed contractor to handle the hazardous material removal.

The proposed project would not result in significant hazards or hazardous materials impacts associated with schools (no schools are located within one-quarter of a mile of the proposed project site), airports, or private airstrips relative to Questions 7c, 7e, and 7f above. Additionally, since the project does not involve the development of residential structures, it would not expose people or structures to a significant risk of loss, injury, or death from wildland fires. Should the site be determined susceptible to fire danger, California State Parks shall take appropriate measures (such as posting warning signage and disallowing campfires) to protect visitors to Topanga State Park from fire hazards.

The project site is not known to be listed as a recorded hazardous materials site (Question 7d). Soil testing has not found contamination beyond the berm, and all hazardous berm materials will be removed and properly disposed of, as noted above.

MITIGATION

The potentially significant risk of upset conditions for transport of the soils are mitigated by existing Federal, State and local regulations governing the transport of contaminated soils. Mitigation measures in Air Quality (covering of trucks) and Geology (compliance with the Berm Removal Plan) will further mitigate impacts.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
8. HYDROLOGY AND WATER QUALITY.				
ISSUES				
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 that 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 alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through 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 on- or off-site flooding?	☐	☐	☐	☒
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) 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 structures that would impede or redirect flood flows within a 100-year flood hazard area?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam?	☐	☐	☐	☒
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

COMMENTS

According to the Topanga State Park Lower Topanga Canyon Acquisition Final Interim Management Plan and Environmental Impact Report (State Clearinghouse Number 2001121028, Prepared by the California Department of Parks and Recreation, July 5, 2002, on file with the lead agency), Topanga Creek has a small watershed, approximately 18 square miles in size. However, it is the third largest and least developed watershed draining into Santa Monica Bay. It extends from Santa Monica Bay northward into the ridgelines of the Santa Monica Mountains and runs primarily from north to south. The majority of it is undeveloped supporting large areas of native vegetation. The watershed can be divided into the upper and lower watershed area. Lower Topanga Creek, in which the proposed project is located, extends from the ocean to the town of Topanga approximately four miles upstream.

Discharge into the system varies seasonally and is closely related to the amount of precipitation the area receives in a given year. High flow events are episodic with long periods of low flows in between. Major floods in Topanga Canyon have been recorded for the years 1938, 1969, and 1980. Hillside erosion and sediment transfers arise primarily in response to storm related precipitation and resulting changes in slope hydrology, generating debris flows. Landslides occur many days or weeks after a precipitation event. Slopes are not well protected from severe erosion due to relatively recent fires in the canyon affecting the native vegetation communities. Floods after fires occur sooner and are of a greater magnitude than a flood not following a fire event. Surface exposure after a fire would likely increase sediment yields significantly. This increased sediment yield from within the watershed would cause sedimentation at the downstream reach near the lagoon where the stream gradient is lowest.

According to the Rodeo Grounds Berm Removal Soil Characterization Report prepared for by the project by GeoPentech in April 2005 (**Appendix E**), groundwater was encountered in boreholes B-1, B-2, B-3, B-4, and B-6 in the Topanga Creek Deposits at depths ranging from approximately 12 to 14.5 feet below the ground surface. Borehole B-5 encountered refusal at a depth of 6.5 feet, therefore no groundwater was apparent in that borehole. The proposed project would have no impact on groundwater supplies, should any exist in the project area, nor would it interfere with groundwater recharge.

As the residential units that were located on the Rodeo Grounds are currently being removed from the proposed project site, and since neither new homes nor other permanent structures will be constructed, the water quality at the proposed project site will likely improve following removal of the homes and the earthen berm. (Although the berm is largely lead-contaminated, the soils and hazardous soil removal consultants do not believe the lead has contaminated the ground or water below or adjacent to the berm; the lead has not even spread to the entire berm.) Likewise, as the proposed project does not include the construction of any structures, people and structures would not be subject to flood hazards as result of the project. By removing the berm, which has interfered with the natural course of Topanga Creek, the proposed project will allow the drainage pattern of the Lower Topanga Watershed and Topanga Creek to re-adjust back to its natural state.

The Pacific Coast Highway bridge over Topanga Creek (Topanga Creek Bridge # 53-0035) was originally constructed in 1932, prior to construction of the berm. Removal of the berm and the return of the Topanga Creek to a natural condition will not adversely impact Topanga Creek Bridge, due to the concrete channel paving on the invert and the transition length of the slope gradient in the area (see **Appendix F**, California Department of Transportation Letter). In addition, most other structures in the project's vicinity were built prior to the 1950's, also prior to construction of the berm, and sit over 35 feet above the Creek's level. Based on the above, no adverse project impacts involving hydrology would occur after project completion. Natural changes in the river drainage pattern (location, scouring and deposition, etc.) will occur naturally over time once the project is complete, which is the desired effect.

However, during the berm removal phase, some impacts to water quality may temporarily occur. In order to reach the restored post-project condition, excavation equipment must be used to deconstruct and remove the berm. In this process, slope erosion and siltation could occur. Best Management Practices and all conditions of the project Regional Water Control Board 401 Permit, the ACOE 404 Permit and the 1600 Fish and Game Agreement must be adhered to, in order to assure less than significant impacts to water quality during the deconstruction phase.

A full analysis of the hydrology and hydraulics of the Topanga Creek Watershed was performed by Moffatt and Nichols Engineers and is fully documented in Appendix C of the Topanga Creek Watershed and Lagoon Restoration Feasibility Study (2002). Cross sections located just upstream of the Pacific Coast Highway Bridge (downstream of the berm) and at 2,961 feet upstream (upstream of the berm) were examined with regards to water level and velocity changes relative to known storm events representing the most severe to least severe return periods. The modeling indicates that removal of the berm and restoration of the floodplain will result in a reduction of both velocity and water level from the berm downstream to the ocean. An excerpt from Table C-3, Hydrologic Modeling Results, is also included in **Appendix F**.

MITIGATION

WQ-1 Best Management Practices and all conditions of the project Regional Water Control Board 401 Permit, the ACOE 404 Permit and the 1600 Fish and Game Agreement must be adhered to assure less than significant impacts to water quality during the deconstruction phase.

9. LAND USE AND PLANNING.

ISSUES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, a 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?	☐	☐	☐	☒

COMMENTS

The project will restore the site to a natural condition. Surrounding land uses are commercial and residential (to be vacated prior to the project). The natural parkland use will be compatible with adjacent vacant, natural terrain and streambed areas. No conflicts with surrounding land uses would occur. The proposal is a conservation and restoration project, and thus, it would not create any adverse impacts on habitat or natural community conservation plans, nor would it conflict with any land use plan policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The project site is State owned, falls within Topanga State Park, and assists in fulfilling the goals of the Lower Topanga Canyon Acquisition Final Interim Management Plan (habitat restoration).

The project is not consistent with the portion of the Interim Management Plan that states than no roads will be removed during the interim period. Currently, a road exists on top of the berm. After the berm is removed, the public will be able to continue to use the lowered road footprint as a trail. The interim period was originally anticipated to last approximately two years, until all of the residents of the area could be relocated and the residential structures demolished. As of February 2006, all of the residents have been relocated. Retention of the roads was necessary to accomplish this goal. The remaining residential structures will be demolished concurrently with this project. Therefore, the goals to be attained during the interim period will have been accomplished.

A General Plan for Topanga State Park, certified in August 1977, governs land use within lower Topanga Canyon. The project is consistent with the current General Plan. A new General Plan has yet to be formulated. However, State Parks may implement resource management projects and projects to protect health and safety on properties it owns and manages, even without a General Plan.

MITIGATION

No mitigation measures are necessary.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
10. MINERAL RESOURCES.				
ISSUES				
Would the project:				
a) Result in the loss of availability of a known mineral resource that is or 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?	☐	☐	☐	☒

COMMENTS

The project is intended to remove only a constructed earthen berm, a majority of which is lead-contaminated. Implementation of the project does not involve any other removal or excavation, and thus would not result in the removal of mineral deposits, if any were to exist. In addition, the proposed project would not cover or otherwise make inaccessible any unknown resources on-site. No mineral resource impacts would occur.

MITIGATION

No mitigation measures are necessary.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
11. NOISE.				
ISSUES				
Would the project:				
a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☐	☒
b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels?	☐	☐	☐	☒
c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)?	☐	☐	☐	☒
d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project, in excess of noise levels existing without the project?	☐	☐	☒	☐
e) Be 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? If so, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) Be in the vicinity of a private airstrip? If so, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

COMMENTS

Short Term Noise Impacts

Project implementation will require the use of demolition and earth moving equipment for removal of the houses and berm, respectively. Other trucks and vehicles or equipment for hauling and for worker transport (construction workers, restoration specialists, etc.) and other project-related purposes would also be on-site during implementation. The loudest of these noise sources will be the demolition and earth moving equipment. Outdoor construction, using properly tuned equipment with mufflers, typically produces sound levels of up to 86 A-weighted decibels (dBA) at a distance of 50 feet. Operation of the equipment would occur in the immediate project area, with some vehicles driving off-site to remove debris and soil. On-site activity will not affect any uses that are sensitive to noise impacts, as all surrounding homes and businesses will be vacated prior to the berm deconstruction project (all but historic structures will be removed, and these will not be occupied). The nearest occupied land uses (homes and businesses) are located beyond intervening hillsides and at considerable distance, such that the temporary project noise would not aversely affect these uses.

The trucks used to haul the dirt are comparable to other trucks currently traveling PCH, Topanga Canyon Boulevard, and the Santa Monica Freeway (10), and would represent only a small percentage of the traffic noise on those roadways.

Local wildlife in the immediate vicinity of the equipment activity could be adversely affected by noise. However, the noise impacts anticipated would be of relatively short duration (approximately one to two months), and wildlife would be expected to return to the site following cessation of the temporary noise and human activity associated with the project. Following the project, the site will provide better and less noisy habitat for wildlife than it was prior to acquisition, when the tenants were occupying the nearby residential units and driving over the berm. In order to reduce temporary noise impacts to the greatest extent feasible, mitigation measures are provided below. With implementation of these mitigation measures, temporary noise impacts are considered less than significant.

Long Term Noise Impacts
The proposal is a creek-restoration project, and no long-term noise sources would exist and no impacts would occur after the earthen berm is removed from the site.

MITIGATION

No long-term mitigation measures are necessary. The following short-term mitigation measures are to be applicable during implementation of the project and are necessary to assure less than significant noise impacts:

N-1 The use of earth moving equipment, trucks and any other sources of substantial noise generation, shall be minimized to the extent feasible, in order to reduce potential wildlife impacts.

N-2 The contractor(s) for the earth movement, hauling, and restoration project shall maintain activities within authorized areas and have workers refrain from excessive noises beyond those necessary from the equipment.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
12. POPULATION AND HOUSING.				
ISSUES				
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?	☐	☐	☐	☒

COMMENTS

The project will not add or eliminate viable housing. The housing units within the acquisition area are to be removed prior to and apart from this project. The tenants were appropriately re-located after the land was sold to the California Department of Parks and Recreation (as part of the 1,659 acre-acquisition adjacent to the southwest boundary of Topanga State Park) in 2001. No impact would occur due to this project.

MITIGATION

No mitigation measures are necessary.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact

13. PUBLIC SERVICES.

ISSUES

Would the project:

a) Result in significant environmental impacts from construction associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	☐	☐	☐	☒
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

COMMENTS

As the project is a creek restoration project and does not provide any commercial or residential features, it does not require any public facilities. The property is a part of the public Topanga State Park; therefore, removal of the berm would have a beneficial impact to the park and provide an enhanced park for use by the public. The property would require police and fire protection, but to no greater degree than is currently required. Schools and other public facilities would not be affected. No adverse impact would occur.

MITIGATION

No mitigation measures are required.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact

14. RECREATION.

ISSUES

Would the project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

COMMENTS

The project site is a part of the Topanga State Park and would not create the need for more parks or recreational facilities. The project will enhance the recreational value of the site for enjoyment of nature studies, which is a beneficial impact. No adverse impact would occur.

MITIGATION

No mitigation measures are necessary.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
15. TRANSPORTATION/TRAFFIC				
ISSUES				
Would the project:				
a) Cause a substantial increase in traffic, in relation to existing traffic and the capacity of the street system (i.e., a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☒
b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Cause 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) Contain a design feature (e.g., sharp curves or a dangerous intersection) or incompatible uses (e.g., farm equipment) that would substantially increase hazards?	☐	☒	☐	☐
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)?	☐	☐	☐	☒

The following analysis is based on the Traffic Control Plans prepared for the proposed project by Katz, Okitsu, and Associates, dated July 24, 2006 (included as **Appendix G**).

COMMENTS

Traffic generated by the project will consist of truck trips for hauling earth off the site, a small number of worker vehicle trips, and a small number of delivery trucks bringing plants and trees for the revegetation plan. The entire berm deconstruction / earth movement phase is anticipated take approximately one to two months. The revegetation program will follow, but will generate very few vehicle trips.

The largest number of trips would be haul truck trips. Worker vehicle trips and plant delivery trips are less of a concern, as they are fewer, and a number of these trips would generally occur on area roadways anyway, as workers and delivery trucks report to various construction or repair job sites. GeoPentech estimated the number of haul trips (**Appendix E**) based upon the amount of berm materials to be removed. Clean Harbors (**Appendix E**) was also consulted. The estimated volume of the berm is 520,000 cubic feet (or 19,000 cubic yards). The total weight of the berm is approximately 26,000 tons (assuming 100 pounds per cubic foot). According to Katz, Okitsu, and Associates, an estimated 726 outbound truckloads will use Pacific Coast Highway and Interstate 10, carrying approximately 17,160 tons. An estimated 374 outbound truck trips will be made by way of Topanga Canyon Boulevard over the Santa Monica Mountains, carrying approximately 8,840 tons. Movement of the dirt off-site would therefore take an estimated 1,100 roundtrips, or 2,200 one-way truck trips, to complete (assuming 24 tons of material per truck trip). The draft haul program proposed by GeoPentech would include up to 50 roundtrip truckloads (100 one-way trips) each day for an estimated 22 workdays. However, as hauling delays may be likely due to both unforeseen road conditions as well as testing of the contaminated berm materials, hauling may occur over a span of up to 40 days. The PCH is adequate in composition and rated to handle up to 80-ton trucks. The trucks proposed for use will weight approximately 34 tons empty, so the added 24 tons of material would bring the weight to 58 tons, well under the maximum. The project haul route and localized traffic control plan in and around the site must comply with Caltrans and California OSHA Guidelines.

The total number of trips would be spread over approximately one to two months, with up to 50 roundtrips (100 one-way trips) occurring and dispersed throughout each workday. Given the size of the project and short duration, such impacts are considered less than significant in most jurisdictions. Thus, it is anticipated that less than significant impacts to transportation or traffic would occur. The berm materials, as noted under Hazards and Hazardous Materials, above, would need to be trucked to landfills. As the trucks disperse from the project site, and eventually enter the freeway system, the trucks represent a smaller percentage of the roadway/freeway vehicles. The impact lessens the further the trucks disperse from the site.

The main concern, therefore, is the impact of trips at the site entry and exit point, on Rodeo Grounds Road at Topanga Canyon Boulevard. Wherever the large trucks or vehicles enter and exit a site, especially where they will enter traffic comprised of passenger vehicles and smaller vehicles, traffic safety is a concern. Significant impacts related to Question 15d could occur unless adequate precautions are taken. A conceptual and localized traffic control plan (included in **Appendix G**) has been developed for the site and addresses safety procedures (the need for flag-persons and parking guidelines for the trucks), as required by Caltrans.

The project is not a development project, thus the Checklist Questions about emergency access, parking, alternative transportation and air traffic do not apply.

<u>MITIGATION</u>

TR-1 A detailed haul route and localized traffic control plan (based on the conceptual plan provided in **Appendix G**) shall be prepared by the applicant and approved by Caltrans during the permit process. The proposed project shall comply with all procedures and requirements stated in the final haul route and localized traffic control plan.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
16. UTILITIES AND SERVICE SYSTEMS.				
ISSUES				
Would the project:				
a) Exceed wastewater treatment restrictions or standards 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?	☐	☐	☐	☒
Would the construction of these facilities cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities?	☐	☐	☐	☒
Would the construction of these facilities 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 that serves or may serve the project, that it has adequate capacity to service the project's anticipated 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 as they relate to solid waste?	☐	☐	☐	☒

COMMENTS

Once in place, the creek restoration project would not require any public facilities. No new infrastructure (storm drains, water lines, etc.) or infrastructure capacity would be needed. Existing infrastructure associated with structures will be removed as part of that project. However, implementation of the project requires the demolition and removal of an earthen berm. The dirt to be removed from the berm site (an estimated 19,000 cubic yards, or 26,000 tons) will be exported to landfills. A portion of that dirt (17,0000 tons) is classified as hazardous and will require disposal at a landfill that can accommodate hazardous materials (i.e., lead contaminated soil from the berm), such as the Mecca II landfill in Riverside County, California; the Kettleman Hills Facility in Kings County, California; and the Clean Harbors Landfill in Buttonwillow, California. The remainder, or 9,000 tons of non-hazardous fill, can be deposited at a non-hazardous landfill.

An on-site generator and water supply will be needed during berm deconstruction. Water is available to the site. No significant impact to public services would occur.

MITIGATION

No mitigation measures are necessary.

	Potentially Significant Impact	Less than Significant With Mitigation	Less Than Significant Impact	No Impact
C. MANDATORY FINDINGS OF SIGNIFICANCE.				
Would the project:				
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?	☐	☒	☐	☐
b) Have the potential to eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
c) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects, and probably future projects?)	☐	☐	☐	☒
d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly?	☐	☐	☐	☒

COMMENTS

Mitigation is identified, above, to reduce significant temporary impacts that potentially could occur during the berm deconstruction phase with regard to: air quality, noise (wildlife), water quality (sedimentation and erosion during earth movement operations), and traffic (flow of trucks on and off the site during hauling operations). The project would have no significant impacts after mitigation. In addition, the following general mitigation measure shall apply to the project to assure understanding and enforcement of the measures:

GEN-3 All contractor(s) for the earth movement, hauling, and restoration project shall be furnished with a copy of all relevant mitigation measures affecting their work.

III. PREPARERS OF THE MND, CONTACTS AND REFERENCES

A. PREPARERS OF THE MND

1. Lead Agency

This document was prepared by Envicom Corporation under the direction of the California Department of Parks and Recreation (State Parks), with guidance from the Resource Conservation District of the Santa Monica Mountains. Firms and Agencies that were consulted or contributed to the document are listed below. In approving this environmental document, State Parks accepts this document as its own.

California Department of Parks and Recreation, Angeles District Headquarters
1925 Las Virgenes Road
Calabasas, California 91302
Contact:
Ms. Suzanne Goode, Sr. Environmental Scientist

2. Project Team

Resource Conservation District of the Santa Monica Mountains (RCDSMM)
122 North Topanga Canyon Boulevard
Topanga, California 90290
Contact:
Ms. Rosi Dagit, Senior Conservation Biologist, Certified Arborist #1054

GeoPentech-Project Geotechnical and Geoscience Consultants
601 North Parkcenter Drive, Suite 210
Santa Ana, California 92705
Contact:
Mr. Steve Duke, Project Geologist

California Department of Parks and Recreation, Southern Service Center-Project Archaeological Consultants
8885 Rio San Diego Drive, Suite 270
San Diego, California 92108
Contact:
Ms. Marla Mealey, Associate State Archaeologist

3. MND Preparers

Envicom Corporation
28328 Agoura Road
Agoura Hills, California 91301
Mr. Joseph G. Johns, President
Contacts:
Mr. Joseph G. Johns, President
Ms. Johanna Falzarano, Associate Project Manager

Contributing Staff:
Ms. Laura R. Kaufman, AICP, Director of Environmental Services
Ms. Johanna Falzarano, Associate Project Manager
Mr. Jack Blok, PhD, Principal Cartographer
Ms. Katherine J. Patey, Director of Biological Services
Mr. Carl Wishner, Principal Biologist
Ms. Christa Hudson, Environmental Analyst I
Mr. Christopher Boyte, Graphics Manager
Ms. Renee Mauro, Administrative, Lead Word Processor
Ms. Emily Feinberg, Administrative Assistant

B. AGENCIES CONTACTED FOR PREPARATION OF THE EIR

1. Federal
- United States Fish and Wildlife Service
- United States Army Corps of Engineers

2. State
- California Coastal Commission Staff
- California Department of Fish and Game
- California State Water Resources Control Board
- Catrans District 7

3. Local
- County of Los Angeles Department of Regional Planning

4. Native American
- Greg Dorame, Tongva Gabrielino Monitor, and John Tommy Rosas, a Tongva Gabrielino liaison
- The California Native American Heritage Commission

C. ORGANIZATIONS, PERSONS, AND PUBLICATIONS CONSULTED IN PREPARATION OF THE EIR

- Kaku Associates, Inc., Telephone consultation and Electronic mail correspondence with Mr. Netai Basu, AICP, Traffic Engineering Associate (consultant to the RCD on other projects). September 29, 2005.
- Letter Suggesting Berm Removal Methods, Michael Gray, Clean Harbors, Remediation and Environmental Construction Division. October 11, 2005.
- Oak Tree Report and Native Tree Preservation and Removal Plan, RCDSMM. July 2006.
- Sampson, Michael. 2005 Archaeological Monitoring of Four Borings within a 20th Century Berm at Lower Topanga Canyon. (On File at California State Parks, Southern Service Center, San Diego).
- Representatives of the Gabrielino/Tongva Indians of the California Tribal Council.
- Rodeo Grounds Berm Removal Study Soil Characterization Report, GeoPentech. April 2005.
- Rodeo Grounds Road Restoration and Revegetation Plan, California Department of Parks and Recreation, Angeles District. July 2006.
- Topanga Creek Watershed and Lagoon Restoration and Feasibility Study, 2002.
- Topanga Creek Watershed Erosion and Sediment Delivery Study, Orme, et. al. 2002.

- Topanga State Park Archaeological Test Trenching For Rodeo Grounds Berm Removal Project, Marla Mealey, Sate Parks. October 4, 2005.
- Topanga State Park Lower Topanga Canyon Acquisition Final Interim Management Plan & Environmental Impact Report Prepared by The Southern Service Center, California Department of Parks and Recreation. July 5, 2002.
- Riparian and Upland Bird Communities at Lower Topanga Canyon, Topanga State Park, California, U.S. Geological Survey, Western Ecological Research Center, 2004 Annual Report.
- Topanga State Park Lower Topanga Canyon Acquisition Interim Management Plan Cultural Resources Survey Historical Resources Evaluation Report, Appendix J to the Interim Management Plan EIR.
- Vascular Plants Observed at the Project Site, Carl Wishner, Envicom Corporation. 2005.
- Traffic Control Plans for Rodeo Grounds Berm Removal, Katz, Okitsu, and Associates, July, 24, 2006.
- Letter discussing potential flooding and impacts to Caltrans' Topanga Creek Bridge (#53-0035), Caltrans, August 24, 2006.
- Giroux and Associates. Air Quality Impact Analysis, Rodeo Berm Removal Project, Los Angeles County, California. August 31, 2006.

APPENDIX A
Comment Letters on the January 2006 Circulated MND

FROM : FAX NO. :8188806165 Jan. 23 2006 11:53AM P1

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY RECEIVED ON ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
100 SOUTH MAIN STREET
LOS ANGELES, CA 90012-3606
PHONE (213) 897-3747
FAX (213) 897-1337

JAN 20 2006

California State Parks
Angeles District

Flex your power!
Be energy efficient!

January 18, 2006

Ms. Suzanne Goode -- Senior Environmental Scientist
California State Department of Parks and Recreation
Angeles District Headquarters
1925 Las Virgenes Road, Calabasas, CA 91302

add / improve Cnstr traffic mit.

Topanga S P Rodeo Grounds Berm Removal
Mitigated Negative Declaration (MND)
SCH No. 2006011040
Vicinity LOS/ 1/40.77 27/0.00-0.30
IGR/CEQA No. 060119/EK

Dear Ms. Goode:

We have received the Initial Study and Mitigated Negative Declaration for the application referenced at above right. The main purpose is restore lower riparian areas associated with a section of Topanga Creek: A berm that protected formerly residential areas is removed and somewhat less than 2 acres that it occupied is restored to natural conditions. Additionally more than 12 acres of floodplain is restored to natural conditions. Lower Topanga Creek then could again accommodate migratory fish. Very extensive earth haul is involved, for removing berm materials. For the California State Department of Transportation (Caltrans), we have the following comments on the application.

We appreciate the substantial attention to truck movements in the Initial Study, including recognition that a localized traffic control plan would be required, especially for intersections.

We ask that the applicant particularly consider measures to avoid excessive or poorly timed truck platooning (caravans of trucks), even on particular days when many truck trips per day to or from a location might be desirable. Conditional requirements might include minimum headway time between vehicles, as for example is sometimes required by Los Angeles City. Caravans of trucks could reduce traffic speeds, delay turns from and onto the State Highways, and also even lead to dangerous queue-backup into roadway travel lanes. Platooning might be of particular concern in circumstances such as a sudden acute demand for large amounts of fill material for another valuable project.

If you have any questions regarding our comments, please refer to our internal IGR/CEQA Record Number 060119/EK. Feel free, if you wish, to contact our review coordinator Edwin Kampmann at (213) 897-1346 or to contact me at (213) 897-3747.

Sincerely,

Cheryl J Powell

CHERYL J. POWELL
IGR/CEQA Program Manager

cc: Mr. Scott Morgan, State Clearinghouse

"Caltrans improves mobility across California"

FROM : FAX NO. :8188806165 Feb. 14 2006 11:18AM P17

TO 918188806165

FEB-06-2006 15:03 FROM LADPW/WSM

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
www.ladpw.org

DONALD L. WOLFE, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: W-0

February 6, 2006

not needed? or unrelated to berm

Ms. Suzanne Goode
California Department of Parks and Recreation
1925 Las Virgenes Road
Calabasas, CA 91302

Dear Ms. Goode:

**LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
RODEO GROUNDS BERM REMOVAL AND RESTORATION PROJECT
RESPONSE TO MITIGATED NEGATIVE DECLARATION**

We reviewed the subject environmental document as forwarded to us by the Resource Conservation District of the Santa Monica Mountains. The subject project site is located in the service area of the Los Angeles County Waterworks District No. 29, Malibu. We currently provide water service to a few homes and businesses within the project area and area south of your project. We will need to abandon the water main and service connections to these homes and businesses. Please coordinate with Mr. Mark Carney of our Malibu office, at (310) 456-6821, Extension 242, so we can abandon these lines in a timely manner.

Also, we have an upcoming construction project at our existing Topanga Beach Booster Pump Station located at 3800 Topanga Canyon Boulevard, in the general vicinity of the subject project. We seek to coordinate construction efforts by our agencies to minimize any conflicts. Please provide us with your anticipated construction schedule and a contact person.

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 2

To Suzanne Goode	From Sami Kabar
Co. Calif Dept of	Co. L.A. Co Waterworks
Dept. Parks + Rec	Phone # 626-300-3339
Fax # 818-880-6165	Fax # 626-300-3385

Ms. Suzanne Goode
February 6, 2006
Page 2

If you have any questions regarding this matter, please contact Mr. Michael Ignatius at (626) 300-3396 or email at mignatiu@ladpw.org.

Very truly yours,

DONALD L. WOLFE
Director of Public Works

MANUEL DEL REAL
Assistant Deputy Director
Waterworks and Sewer Maintenance Division

MI:lm
EH282

excerpts from Lower Top Interim Plan

Executive Summary

The *Interim Management Plan* is the first phase of planning efforts by the California Department of Parks and Recreation (Department or California State Parks) at Lower Topanga Canyon, a new addition to Topanga State Park in Los Angeles County. The Final *Interim Management Plan* prescribes a number of small projects that allow the Department to effectively manage the Lower Topanga Canyon area in the short-term and provide data recovery to assist in subsequent planning efforts for Lower Topanga Canyon.

This Environmental Impact Report (EIR) is being prepared to provide full public disclosure of the Department's proposed actions. The Department's purpose in moving forward with these activities in Lower Topanga Canyon is protection of natural and cultural features and provision of public access. The studies and actions described herein represent a proactive approach by the Department to gather the data necessary to utilize "Best Management Practices" in our park management efforts while stabilizing the environment. The activities proposed herein generally do not pose long-term significant impacts on the environment. However, implementation of the *Interim Management Plan* will cause an unavoidable significant disruption of an established community and a Statement Of Overriding Considerations will need to be adopted for this impact. This Statement will be prepared as part of the Notice of Determination, for signature by the Director of the California Department of Parks and Recreation.

Other potentially significant effects identified include temporary short-term impacts to vegetation, wildlife, archaeological resources, geology, water, air quality, noise, and circulation resulting from the demolition and removal of structures, removal of invasive plants, and miscellaneous minor public-use improvements. Mitigation measures proposed herein, however, reduce these potential impacts to a level below significance.

Impacts to the existing system through project implementation will be out-weighed by the overall benefit of habitat improvement and enhancement for visitors, as well as for native wildlife and their associated habitats.

Preferred Plan Goals and Actions

Goal #1

ENHANCE WILDLIFE HABITAT AND PLANT COMMUNITY VALUES BY PROMOTING SUSTAINABLE NATURAL ECOSYSTEMS. PROTECT RARE, THREATENED, AND ENDANGERED SPECIES.

The Lower Topanga Canyon Acquisition (Lower Topanga Canyon) encompasses one of the last remaining natural coastal stream courses in southern California. Topanga Creek is a free flowing, meandering creek that moves through a variety of natural vegetation communities and empties into the Pacific Ocean 8.8 miles from the top of Topanga Canyon. Topanga Creek has a uniquely small watershed (18 mi^2) and is predominately undeveloped. The new acquisition area encompasses approximately 1,659 acres, and contains significant natural and scenic features. Topanga Canyon is an example of a diminishing ecosystem nestled in the midst of the highly urbanized Los Angeles metropolitan area.

Since riparian woodlands and clean free-flowing creeks are exceedingly and locally rare, many of the associated plants and animals are likewise rare. In addition, a wide variety of wildlife frequents the canyon indicating that much of the site still maintains biological integrity. Lower Topanga Canyon is significant in that it protects a remnant example of the natural heritage of southern California's coast. Coastal riparian woodlands are becoming a rare resource in southern California as urban development continues to expand. Lower Topanga Canyon supports native riparian woodlands along Topanga Creek and steep chaparral-covered canyon walls. Riparian woodlands in Topanga Creek include the California Sycamore series, Arroyo Willow series, and the White Alder series. Each woodland community supports a unique associated biotic community that include native fish, aquatic insects and amphibians in the creek, and a unique assemblage of endemic plants and a diverse suite of birds, insects, and reptiles on the slopes.

This plan delineates a Natural Habitat Area that represents land with a high potential for quality natural habitat and restoration of natural ecological processes. This Zone generally includes the creek, riparian woodland, flood plain, lagoon and steep backcountry.

It is important that the Department maintains natural processes including landforms, fluvial processes, natural erosion, sediment transportation, and vegetation succession to the maximum extent possible, while minimizing inputs from unnatural sources.

For the entire watershed system to thrive, the water quality of Topanga Creek must be protected from deterioration from both external and internal sources. (See Goal #4 below)

Action 1b
Monitor plant community health and development.

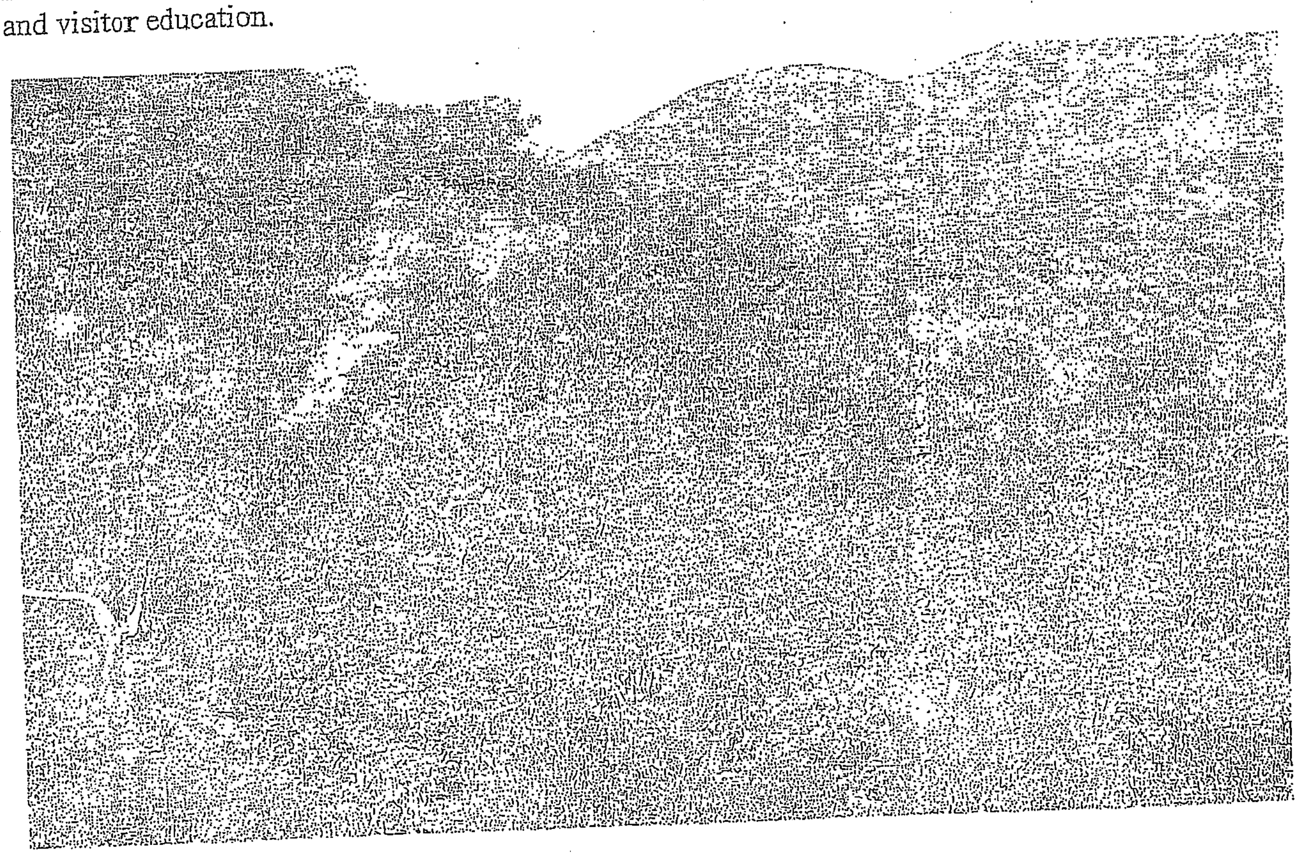
California State Parks will work to facilitate implementation of a program to monitor the condition of the native plant communities. Monitoring is essential to provide baseline data against which to judge the changes and variations in plant and animal populations over time, as well as the success of specific management actions. Methods will be simple and repeatable, using established and accepted sampling techniques and statistical procedures. Monitoring plant community health and development will help ensure the stability of the habitat quality and detect fluctuations in response to a range of environmental variables before negative effects occur.

Action 1c
Reintroduce displaced or extirpated species.

All seedlings and saplings used in habitat re-introduction and restoration projects will originate from seed collected from native plant taxa within Topanga State Park boundaries or from a nearby area supporting a comparable species composition. To be considered complete and successful, reintroduction and restoration areas must be similar in appearance, species composition, and ecosystem functions to the surrounding habitats.

Action 1d
Perpetuate wildlife assemblages.

California State Parks will work to facilitate protecting, restoring and interpreting the native terrestrial and aquatic animals in the Lower Topanga Canyon area. Protection may include, but is not limited to habitat preservation, restoration/enhancement, seed banking, (see Actions 1 a, 1c) and visitor education.



Action 1e
Remove manmade intrusions in the Natural Habitat Zone. Remove fences, structures and debris.

The removal of non-historic manmade features will increase natural habitat and will improve the natural movement of wildlife through the area. Removal also may have a positive effect on water quality.

Removal of the structural material and debris will be accomplished in a manner that will ensure protection of the site's natural and cultural resources as well as minimal effect on local traffic. To the degree necessary, portions of the work may be accomplished through hand labor. The work will be timed such that construction vehicles will not conflict with heavy traffic patterns along PCH and Topanga Canyon Boulevard.

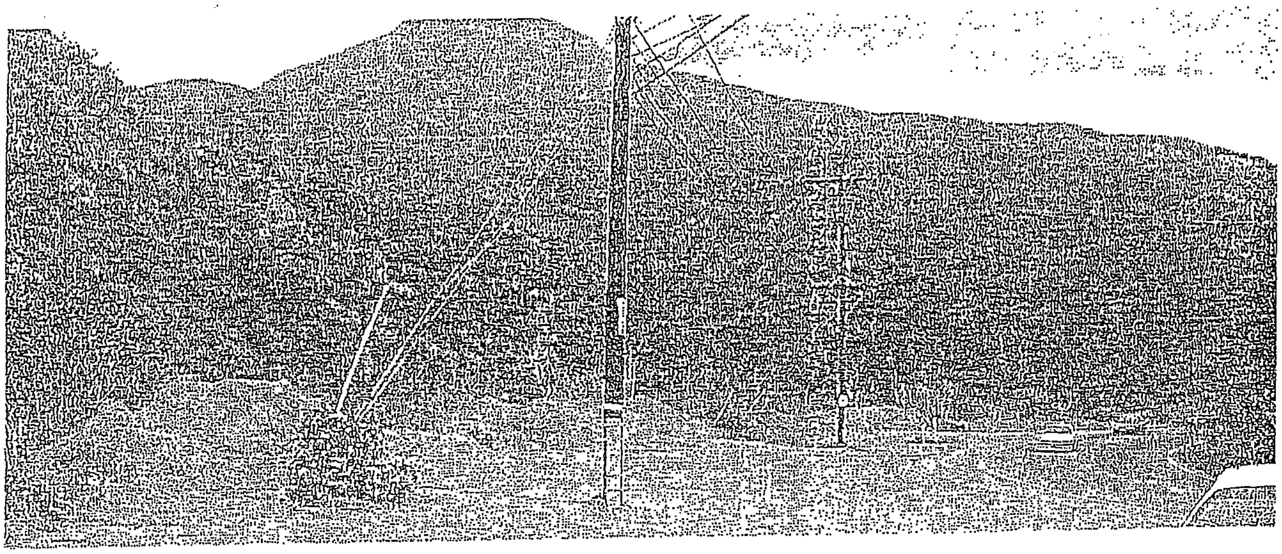
During implementation, temporary educational signs will explain the benefits of this action.

Rodeo Grounds

Action 1g
Work with the California Department of Transportation to discontinue dumping on California State Park property along Topanga Canyon Boulevard, and removal of existing dumped material and repair landslides associated with state route 27.

Previous and current practices, such as roadway maintenance and repair, coastal development, and human habitation in the floodplain, have changed the composition and ecological conditions in the Lower Topanga Canyon area. Changes such as these alter the ecological dynamics of the system and reduce wildlife and native plant values.

Material that is dumped along Topanga Canyon Boulevard may include hazardous substances, can introduce additional sediments into the stream system and is unsightly.



Debris piles along Topanga Canyon Boulevard

Action 1h
Continue to actively participate in and support planning efforts and studies that will result in restored natural processes, protection of rare, threatened, and endangered species, and preservation and enhancement of biocorridors.

These planning efforts will, most significantly include lagoon restoration and streambed restoratior feasibility studies. Structures located in the floodplain (*e.g.*, homes and levees) have altered the natural flow and direction of Topanga Creek, therefore, in order to restore the natural flow and meandering pattern of the creek, these structures should ultimately be removed. The current creek configuration has resulted in changes in water quality, sediment transportation, and lagoon size anc configuration.

Plants
This action includes protection of listed species, those species that meet the legal requirements for listing, but are not currently listed, and those considered locally sensitive or endemic to the area.

Scientifically sound methods and protocols for sensitive plant surveys will be developed and implemented to find previously unknown sensitive plant populations within the park. California State Parks will work with local agencies to develop and facilitate implementation of a monitoring program to ascertain the condition of the native plant communities and wildlife habitats.

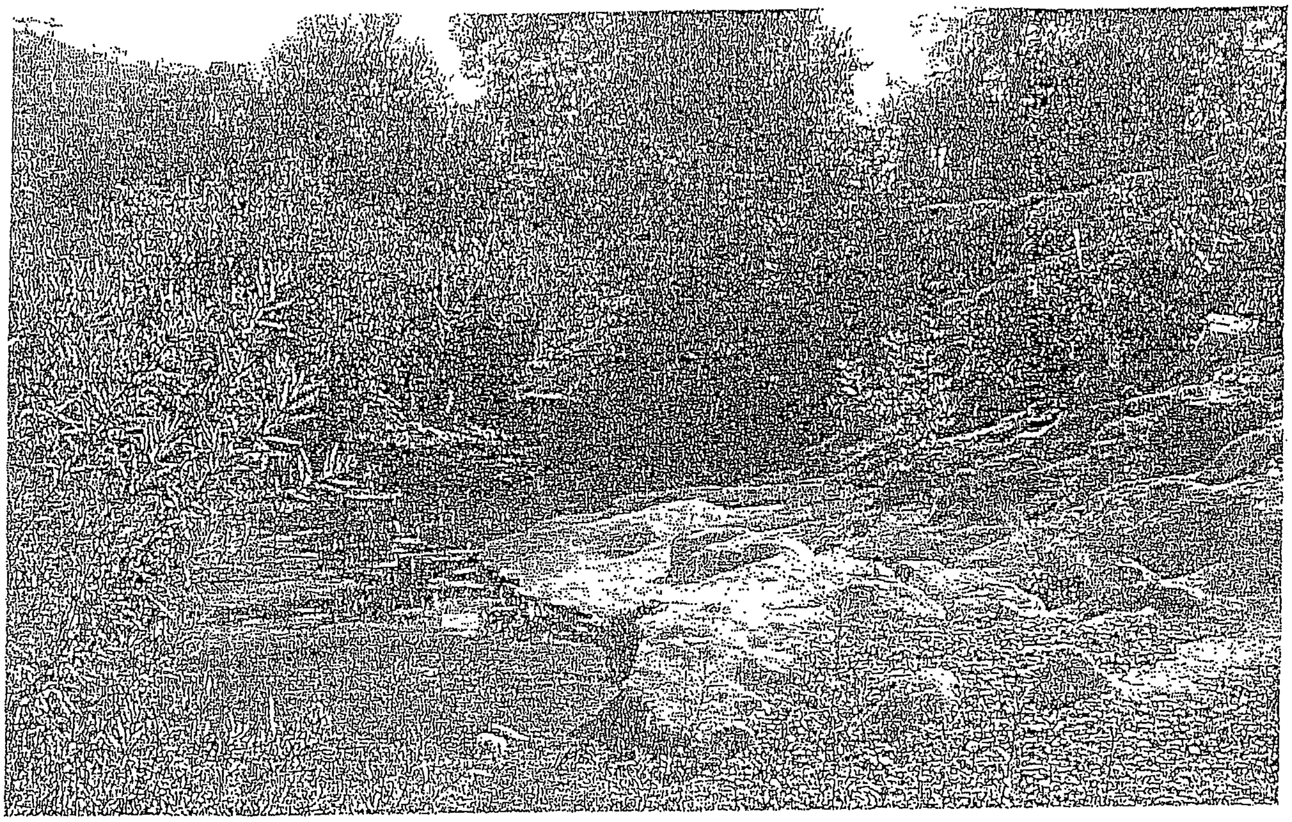
Rejected Alternatives

Incorporate complete lagoon restoration and streambed restoration.

In contrast with the preferred plan, the implementation of complete lagoon restoration and streambed restoration would mean that during the interim period:

- There would likely be no place to implement the temporary trailhead parking area (Action 3a).
- There may be a need to displace some commercial enterprises (Action 3e).

Though the restoration of natural processes is an important goal for California State Parks, it will take some time before lagoon and streambed restoration plans can be formulated and fully implemented, extending beyond the interim period. California State Parks is committed to continuing to work closely with participating agencies toward fulfilling these restoration goals (see also Action 1h, page 16), but it is not feasible, yet, to implement final lagoon and streambed restoration during the interim period.



Concrete-faced levee along Topanga Creek, protecting Rodeo Grounds area

Perform slope restoration in the area of extensive dumping along Topanga Canyon Boulevard. Additional studies should be performed that will evaluate the condition and extent of the fill material. California State Parks and the California Department of Transportation should work cooperatively to devise the best plan to restore these slopes to their natural condition. This work will take longer than the interim period, and therefore, should also not be part of this plan. (See also Action 1g, page 16.)

EIR

Southern California coastal areas are limited by space and market demand. The residential characte this area will be replaced by public open space use and natural systems. This effect is unavoidable because private residential use is inconsistent with State Park mission and policies, which govern th newly acquired land. All of the residences are on septic systems in a coastal area and studies indica that there may be contamination from these systems into the creek. Further, many of the units are located within the 100-year floodplain presenting a risk to residents in the event of flooding. Maintaining year-round access for residents during the rainy season requires manipulation in the floodplain to protect structures, roads, and bridges. Allowing continued residential uses within the Canyon acquisition would interfere with the environmentally beneficial goals of the plan.

Finding: The significant effect to the local community is unavoidable and unmitigable; a statement c overriding considerations will need to be made.

Potentially Significant Effects and Proposed Mitigation

Vegetation

Impact: Actions involving the manipulation of vegetation in or adjacent to the Natural Habitat Zone (Actions 1a, 1e, 2a, 3a, 3b, 3c,4a, 4b), have the potential to affect endangered, threatened, or rare species (Appendix D), and special status habitats.

Discussion: Currently three sensitive plant taxa are known to occur within the riparian corridor in the Lower Topanga Canyon Acquisition area. They are:

Plummer's mariposa lily (*Calochortus plummerae)*
Lewis' evening primrose (*Camissonia lewisii)*
Fish's milkwort (*Polygala corunta* var. *fishae)*

The California Department of Fish and Game Natural Diversity Database classifies two native plant communities within the new acquisition area as sensitive, Topanga Creek (a perennial stream), and Sycamore Alder Riparian Woodland. Removal of invasive exotic vegetation, removal of manmade intrusions, trail construction and the development of picnic areas could create adverse impacts to native riparian vegetation, rare taxa or the perennial stream. All actions will be in compliance with local, state, and federal permitting and regulatory requirements.

Mitigation 1: Prior to the implementation of exotics removal, facilities development and the removal of manmade intrusions (including structures, fences, and debris), exotic plant populations will be mapped and all areas will be surveyed for the presence of sensitive species including endangered, threatened or rare plant taxa. Listed plant species found on site will be avoided to the fullest extent possible. If a listed plant species is detected within the area of potential impact, the area shall be flagged, personnel educated on the sensitivity of the area, and instructed to avoid it. Trails and picnic areas will be redesigned, and staging areas will be relocated to avoid all listed taxa locations.

Mitigation 2: Rare natural communities shall be avoided or impacts minimized to a level below significant. Picnic areas and trails will be designed to avoid the need for removal of any trees. Removal of invasive exotics (Action 1a) can serve as mitigation for any potential impacts resulting from construction of picnic areas and trails. Furthermore, trail construction design could include placing trails in areas of heavy infestation, thereby removing exotic species from the system and avoiding adverse impacts to native vegetation.

4

EIR

Alternatives Analysis

The objectives of the proposed project are to 1) protect natural and cultural values, and 2) provide interim public access to the newly acquired Lower Topanga Canyon of Topanga State Park, until such time as the General Plan can be amended to provide long-term guidance for the development and management of the site. The range of reasonable alternatives considered was chosen based on public comment received during a series of public meetings held during development of the *Interim Management Plan* and are discussed on Pages 35-40, and listed below:

1. Maintain private residential use.
2. Eliminate commercial enterprises along Pacific Coast Highway.
3. Incorporate complete lagoon restoration and streambed restoration.
4. Perform slope restoration in the area of extensive dumping along Topanga Canyon Boulevard.
5. Implement overnight camping or recreation vehicle use as suggested in 1977 General Plan.
6. Create formal trailhead parking along Topanga Canyon Boulevard.
7. Create trailhead parking area in the Creekside Area.
8. Create formal trailhead parking in front of the Topanga Ranch Motel.
9. Remove all non-native plant species.
10. Remove and revegetate all dirt roads within the natural habitat zone.

"No Project" Alternative

Alternative 1, listed above, essentially represents the "No Project" Alternative. Relative to the proposed project, this alternative would mean that the goals of natural and cultural resource protection and of providing public access would not be realized during the interim period. Impacts to vegetation, wildlife, cultural resources, water, recreation and aesthetics, as well as exposure of public to flood hazards could potentially occur under this alternative. This alternative is not considered to be environmentally superior to the proposed project, which ameliorates existing negative environmental effects. Please see discussion in Section on Known Controversies.

Environmentally Superior Alternatives

According to the *CEQA Guidelines* (Sec. 15126.6(c)&(f)), only those alternatives that could feasibly accomplish the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects are required to be analyzed in detail. For this project this would primarily mean alternatives that go further in ameliorating the existing negative environmental effects. Of the alternatives considered, those that meet this description are Alternatives 3, 4, 9, and 10 above.

Alternatives 3 & 4 would provide for complete restoration of the lagoon, streambed, and highway slopes. While this would accomplish the long-term goal of natural resource protection, there would be more significant short-term effects to vegetation, wildlife, cultural features, geology, water, air, and noise than the proposed project. These alternatives represent larger scale projects than can be accomplished during the interim period, but it is the intent of State Parks to study these alternatives during the interim period for potential future implementation. Any potential future actions involving large-scale restoration of the hydrologic system would be subject to further review under CEQA.

Alternative 9 would remove all non-native vegetation instead of just the most invasive species as proposed. While this would go further in accomplishing the long-term goal of natural resource protection, there would be more significant short-term effects to vegetation, wildlife, geology, water, air, and noise than the proposed project if it were attempted over the same two-year period. Phasing of the removal efforts would minimize these effects, and it is the intent of State Parks to continue exotic

From: Lynne Haigh <l.b.haigh@verizon.net>
Subject: Fwd: Rodeo Grounds Berm Removal Process
Date: February 15, 2006 11:36:56 AM PST
To: Rosi Dagit <oaksrus@mac.com>

Rosi,
I was not able to get this to go through to s. good or to sluce@waterboards. Please forward it for me to the correct addresses.
Thanks,
Lynne

Begin forwarded message:

> From: Lynne Haigh <l.b.haigh@verizon.net>
> Date: February 15, 2006 11:32:47 AM PST
> To: rscha@parks.ca.gov
> Cc: Rosi Dagit <oaksRus@mac.com>
> Subject: Rodeo Grounds Berm Removal Process
>
> Mr. Ron Schafer
> Superintendent Angeles District, California State Parks,
>
> I am writing this to let you know that as a long time resident of Topanga I am greatly in favor of moving ahead promptly with the Rodeo Grounds Berm Removal Project. Although, as usual, the issues involved are complex, it appears to me that sufficient steps have been taken to make this an appropriate project with which to continue at this time when funds are available for the work. I support moving ahead with soliciting funds on Thursday, and then resovling any problems with the Interim Plan.
>
> I place a high priority on the timely removal of this berm both to allow for more public use of the area and to improve the habitat for steelhead trout. As a Topanga Canyon Docent I look forward to being able to share more of Topanga State Park's beautiful resources with the public, and I regret the long delays which have already occurred in regard to public use of the Lagoon area.
>
> Thank you for giving this your consideration.
>
> Lynne Haigh
> 21034 Hillside Dr.
> Topanga, CA 90290
> 310 455-1696

From: Gerlinde Gautrey <ggautrey@earthlink.net>
Subject: Rodeo Grounds - lower Topanga State Park
Date: February 15, 2006 4:10:35 PM PST
To: rscha@parks.ca.gov, sluce@waterboards.ca.gov, mary.delancy@resources.ca.gov
Cc: sgood@parks.ca.gov

Dear Mr. Schafer: As a taxpayer and property owner in Topanga I was thrilled when the State Park made the acquisition of lower Topanga. That was many years ago. The Lower Topanga Acquisition Interim Management Plan was drafted, an Environmental Impact report, a Watershed Management Report etc etc all prepared and researched at great expense in time and money. And now you are putting the funding of the restoration of Topanga Creek and Lagoon in danger by not supporting, and even stonewalling, the implementation of the Rodeo Grounds Bern Project. I am sure you are well aware of how long it takes to get grant money and state financing approved. For the project to begin in summer 2007 there is no time to loose ! This week the SMBRC is scheduled to hold a meeting and a vote on earmarking money towards implementation of some of the goals for restoring Topanga creek is on the agenda. This money is vital to obtain matching funds from the NOAA Open Rivers grant project.
I understand that despite numerous court judgments and huge sums of relocation money paid out, some residents are still resisting. That cannot possible be the reason for you not supporting the go ahead on the funding applications. The deadline for everyone to move out has passed only a few weeks ago and it will be months before the work on the berm can begin. In the meantime the condition of the rodeo ground is steadily deteriorating!
My kids surf at Topanga Beach. Once again Heal the Bay gave Topanga Beach an F for the last four weeks reporting period. So the removal of the old septic tanks, the household waste and toxic materials is way way overdue !!!!!!!!! Part of me wishes that this property would still be in private hands because I believe Public Health and Safety requirements would be enforced a lot more stringent !!!
Removing the old structures, the septic tanks, the hazardous waste and materials, the contaminated berm and close the area to public vehicular traffic should be on high on your agenda. Safe passage for steelhead trout and clean water for animals and people alike should be your goals. We taxpayers and residents are looking to the State Park management to be good stewards of our tax dollars and not delay the implementation of the interim plan which would only mean higher expenses down the road!

I do appreciate you taking the time reading this. I know you very often only hear from people who disagree with you. This is such a fabulous opportunity for extending our state parks and restoring and cleaning up a lovely place full of many threatened and rare species. I do hope you will get the support from all sources to go ahead with the project!

Gerlinde Gautrey
21437 Highvale
Topanga CA 90290
310.455.2869

From: Jackie Safonov <jsafonov@earthlink.net>
Subject: MND please approve
Date: February 15, 2006 5:00:47 PM PST
To: rscha@parks.ca.gov
Cc: sgood@parks.ca.gov, Rosi Dagit <oaksrus@mac.com>
Reply-To: jsafonov@earthlink.net

Dear Mr. Schafer:

We urge you to approve the MND for the Rodeo Grounds Berm removal project in Topanga. General Plan or not, this work needs to be done ASAP and the funds are needed to do the job. Please save us all from additional expenses down the line and approve the MND.

Sincerely,
Jackie & Greg Safonov
2711 Halsey Rd.
Topanga, CA 90290

From: Jackie Safonov <jsafonov@earthlink.net>
Subject: MND please approve
Date: February 15, 2006 5:03:45 PM PST
To: sluce@waterboards.ca.gov
Cc: sgood <sgood@parks.ca.gov>, Rosi Dagit <oaksrus@mac.com>
Reply-To: jsafonov@earthlink.net

Dear Shelley Luce:

We urge you to approve the MND for the Rodeo Grounds Berm removal project in Topanga. General Plan or not, this work needs to be done ASAP and the funds are needed to do the job. Please save us all from additional expenses down the line and approve the MND.

Sincerely,
Jackie & Greg Safonov
2711 Halsey Rd.
Topanga, CA 90290

From: Clark Stevens <clark@newwestland.com>
Subject: Fwd: support for berm removal
Date: February 15, 2006 5:09:16 PM PST
To: Rosi Dagit <oaksrus@mac.com>

Begin forwarded message:

> From: Clark Stevens <clark@rotoark.com>
> Date: February 15, 2006 5:04:33 PM PST
> To: rscha@parks.ca.gov
> Subject: support for berm removal
>
> dear mr. shafer
>
> i am writing in strong support of the proposed berm removal project. the work proposed is long overdue to correct a practice that is not only unsustainable, but also in likely violation of several environmental laws
>
> best regards,
>
> clark stevens
> 21060 winfield road
> topanga, ca 90290

Benjamin Allanoff
21936 Canon Dr
Topanga, CA 90290
(310) 455- 4156
Fax 455-0280

Suzanne Goode
California Department of Parks and Recreation
1925 Las Virgenes Road
Calabasas, CA 91302.

January 16, 2006

Suzanne,

On behalf of the Topanga Creek Watershed Committee and all of the stakeholders and residents of Topanga Canyon, I'd like to request that you make a public presentation in the community with regard to the proposed berm removal project in Lower Topanga.

While I have no reason to think that there is anything objectionable about the project, the Committee met last week and unanimously agreed that the community should be directly informed about what kind of work this project will entail, what it's purpose is, and how that fits in to your long range plans for the Creek and Canyon. We are always interested in improving communication and partnership with the government agencies that work in the canyon, and feel that your presence here would go a long way towards letting the residents know that you are not ignoring them.

We appreciate that written copies of the proposal are available for public review in Malibu, Calabasas, and Pacific Palisades, but feel that (1) the residents of the canyon deserve an explanation that will be clear to non-scientists, and an opportunity to ask questions, and (2) we would also appreciate it if you could have a copy available at the RCD offices, where the folks who I'm guessing might be most directly impacted by your project could have access to it.

Please call me and let me know what you think. I would be happy to help arrange a meeting place and time if you so desire.

Sincerely,

Ben Allanoff

Ben Allanoff

Introductory Comments on the Proposed Rodeo Grounds Berm Removal and Revegetation Project

1. The Mitigated Negative Declaration is inadequate: An EIR is required because the Mitigated Negative Declaration leaves numerous significant impacts that either have not been mitigated or are not mitigated to a level of insignificance. They include aesthetics, air quality, biological resources, geology, hazardous materials, hydrology and water quality, land use and planning, recreation and cumulative impacts.

2. CEQA requires review of cumulative impacts: The project violates CEQA's EIR requirement for "cumulatively considerable" impacts defined as including "probable future" projects. This is an attempt to take a piecemeal approach to a much larger project. There are several related streambed and lagoon restoration projects for which approximately $1million in study grants have already been expended. This proposal depends for its purported benefits on these other projects, especially restoration of Topanga lagoon – the only entry and exit point for Steelhead Trout. The lagoon project is a massive project with uncertain support from Caltrans or the public. It entails excavation and disposal of 800,000 cubic yards of fill dirt, replacement of the existing PCH bridge with one 470-feet long, relocation of identified historic resources, closure of visitor-serving businesses and years of construction. The current proposal, while much smaller, is still as Caltrans terms it "a very extensive earth haul" of 26,000 tons of earth. There is no doubt that a private developer would be required to prepare an EIR for such a volume of grading. There is no urgency for this project. It violates explicit provisions in the adopted Interim Management Plan for the park. It must be examined in an EIR for the cumulative impacts of the entire Topanga Creek and Lagoon restoration project, before making this first significant commitment without public involvement. [The Interim Management Plan for Lower Topanga acknowledges that this combined restoration effort will require further review under CEQA, see page 54 - "These alternatives represent larger scale projects than can be accomplished during the interim period, but it is the intent of State Parks to study these alternatives during the interim period for potential future implementation. Any potential future actions involving large-scale restoration of the hydrologic system would be subject to further review under CEQA."].

3. Public Safety: This proposal removes a public safety flood-control levee without addressing the increased flood hazard. Flooding or periods of heavy rain and flow of Topanga Creek have resulted in numerous deaths over the years. [See attached clippings of devastating floods in the Rodeo Grounds.] No mapping is provided as to what will happen in a flood or how park visitors will be protected.

4. Non-Compliance with the Interim Plan: This project violates CEQA's requirement for compliance with existing state-approved plans for the property. This project violates the Lower Topanga Interim Management Plan in several ways. It must be delayed until a General Plan is created with public input to balance a wide array of public use and access issues including restoration goals and alternatives. Firstly, the Lower Topanga Interim Management Plan and its accompanying EIR expressly

prohibit restoration of roads to natural conditions during the interim period and the berm is one of four roads specifically identified in the Interim Plan.[Page 15 (Action 1f) – "Four existing dirt roads will be closed to public use during the interim period: the routes from Topanga Canyon Boulevard through the Rodeo Grounds, the route through Topanga Lane, the route down into the Creekside Area from PCH, and Brookside Drive. Roadways will not be restored to natural conditions during the interim period. They will continue to be used temporarily by the Department for implementation of the actions contained herein and as non-vehicular routes for the visiting public." Page 54 - "As part of the Interim Plan (Action 3d), studies are proposed to determine the appropriate disposition of roads and trails within the new acquisition area. Final disposition of roads will be addressed in future management plans and subject to further review under CEQA." et al.] Secondly, the Interim Plan limits streambed and lagoon restoration to a category for study and research only [Pages 16, 37, 54 and 58], recognizing that it would be "subject to further review under CEQA." This project is described on page I-1 as intended to "restore the natural floodplain, creek channel and sediment transport systems at the southern end of Topanga Creek." This description clearly exceeds the scope of the Interim Plan and should be considered instead during the general planning process and in relation to other priorities for this public park property. [Letter from Rusty Areias to Sen. John Burton on July 11, 2001, overriding provisions in Proposition 12 against purchase of developed properties on grounds that it was a "unique opportunity" and fulfilled the desire to "bring parks and open space to our crowded urban metropolitan areas, especially in the Los Angeles region." This premature project will further delay the opportunity for the public to access this park, and diverts funding priorities to an individual project instead of to creating a general plan to meet regional parkland needs. Thirdly, the Interim Plan rejects wholesale eradication of non-native plants and trees, focusing instead on "the most invasive exotic plants such as Giant Reed, Cape Ivy and Tree of Heaven." This project calls for removal of more than 100 non-native trees over a 12-acre area. While occasionally State Parks maintenance has removed exotic trees due to hazardous conditions, there is no urgency to implement a broader program of eradication now, until a General Plan concludes that it should be done. Indeed, this option was examined as an alternative in the Interim Plan and rejected, recognizing short-term impacts not allowed under the limited goals of the Interim period. [See Pages 12 and 54]

5. <u>Berm Excavation and Tree Eradication:</u> The Interim Management Plan, as stated on page 3, "prescribes a number of small projects that allow the Department to effectively manage the Lower Topanga Canyon area in the short term and provide data recovery to assist in subsequent planning efforts for Lower Topanga Canyon." It further states on the same page that the Interim Plan had been "prepared to provide full public disclosure of the Department's proposed actions" with an overriding goal of "stabilizing the environment." Similarly, on page 55, the public is assured that implementation of the Interim Plan "will not create any significant, irreversible changes to Lower Topanga Canyon" and that all proposed actions could be reversed if deemed appropriate in a General Plan. The lately proposed removal of the Rodeo Grounds Berm is nowhere listed among action or implementation items. Indeed the

berm is pictured on the page 37 to illustrate lagoon and streambed restoration projects that were considered alternatives, but were [Page 35] "deemed to be inconsistent with the interim management goals…and/or to be inappropriate for implementation during the approximately 2-year interim period."
The berm removal project requires excavation of 26,000 tons of material, removal of 36 to 42 mature native trees and more than 100 mature non-native tree species – e.g. palms, pines, eucalyptus and fruit trees. The excavation is itself a massive undertaking. Similarly, the tree removals over a 12-acre area exceed the target of reducing "the most invasive species" during the interim period. [See above] These trees include species that have been present for years in other parks in the Santa Monica Mountains National Recreation area and if they are to eventually be removed, should be removed gradually to reduce impact on wildlife. The Interim Plan rejects an alternative favoring wholesale removal of non-native plants because [Page 54] "there would be more short term effects to vegetation, wildlife, cultural features, geology, water, air, and noise than the proposed project." Also, removal of many of these trees is controversial because they are not an "invasive" threat that displaces other native habitat, and indeed preserve a measure of the cultural and aesthetic history of the property. CEQA is supposed to been a means for resolving public disputes, not for circumventing the. According to the Governor's Office of Planning and Research, "CEQA can help resolve public policy disputes relating to development projects. Technical issues that find their way into policy disputes, no matter how dependent on scientific considerations, are inherently value-laden. CEQA specifically addresses the potential for conflicting expert discussions and mandates that all sides of an issue are considered." [Also, please see Discover Magazine cover story "Are Invasive Species Really So Bad?" May 2005 for a discussion on the evolving thinking on the subject of non-native species. It suggests the line between real science and the human desire to control nature is sometimes unwittingly breached. The "real crime" of alien species, according to the Discover article, "isn't against nature; it's against us and our self-serving ideas of what nature is supposed to be." Similarly, scientists are quoted to say that invasive species have shown that there are many unused resources in a given ecosystem that can support the added diversity. The article concludes: "Rather, the point is that the only reliable measure for the value of native species is our desire. Whether invasions are good or bad is a question to ask ourselves, not our scientists." This would argue for complying with the existing Interim Plan and delaying an irreversible tree eradication project until the public can join in the discussion during a general planning process.]

6. MND Review Process: Announcement of MND review period, violated CEQA provisions by failing to provide for Internet access to the MND even though it could have been made available that way and by failing to provide a local public review copy at the Resource Conservation District in Topanga. The RCD is the closest public agency to the project and it is also the responsible entity applying for $3.6 million to carry out this project. An RCD senior staff member, who prepared the funding application for this project, personally hired the contractor to prepare the MND and was well aware of these obligations under CEQA. Similarly, principal staff members

at both the RCD and State Parks were not available to answer questions during the review period.

Comments on the Project Description and Goals

The project description and goals include misinformation and exaggerations. Most important among them are the purported benefits to endangered Southern Steelhead Trout. Second perhaps is the assertion that eliminating 140 mature, shade-giving trees represents an aesthetic and environmental habitat improvement.

1. Southern Steelhead Trout: The description claims that, as a result of this project, steelhead will be able "to access four miles of suitable habitat that is now seasonally restricted due to the subsurface flows associated with the berm."
   a. This project could not possibly provide four miles of suitable habitat because the RCD's own data shows a "full barrier" at 3.3 miles. [See figure 6, NOAA grant application] Indeed, no trout are currently found beyond 2.7 miles where the creek elevation rises sharply. A short stretch of improved habitat 2 miles downstream might be a good thing, but it strains credulity to suggest that it will help fish scale boulders to reach elevations upstream they do not currently attain.
   b. The contention that fish are seasonally restricted due to "subsurface flows associated with the berm" needs further supporting evidence. First, how is widening the creek channel not going to make it shallower and similarly subject to drying out, as well as slower and subject to refilling itself with sediment? (Houses were originally constructed in the Rodeo Grounds before a berm was required, presumably because it was pretty dry and flood safe. Circumstances evidently have changed, perhaps with increased upstream development, erosion and imported water runoff.) Second, how does seasonal subsurface flow during dry periods affect steelhead migration when they can only get in or out during major storm events that open up the sandbar at Topanga lagoon and, of course, create surface creek flow through the Rodeo Grounds?
   c. As it stands now, the documented presence of Steelhead trout occurs north of the berm, suggesting that they already have upstream access. This is apparently possible despite three huge landslides, which almost fill the creek just a little ways up from the berm.
   d. The claim that "Ultimately, the project is expected to indirectly provide summer rearing habitat and improve over-winter habitat and critical passage links for endangered Southern Steelhead Trout" raises the question "What does 'indirectly' mean?" Is this just boilerplate verbiage?
   e. Finally, the description makes no projections for increased fish populations as a result of this project, so there will be no way to measure the success or failure of this project. Clear data on current fish populations are not provided. Neither are results of genetic testing provided to establish that current fish counts represent a migrating species and not a resident population. Previous listings of threatened habitat range for Southern Steelhead, up until 2001, did not extend this far south, perhaps reflecting a historical view that Topanga Creek has only marginal potential as a sustained Southern Steelhead habitat.

2. <u>Removal of 100 plus trees:</u> Removal of more than 100 non-native trees represents a disturbing, purist approach to resource management that is ill-suited to the particular location and history of the Lower Topanga Rodeo Grounds. It is an approach that is not uniformly supported by environmental scientists [Discover magazine May 2005 cover story] or the

public and is therefore worthy of an honest public debate. It certainly cannot be claimed that loss of these trees constitutes an aesthetic improvement. This proposal would replace these trees with tiny seedlings, acorns and walnuts planted in plastic tubes, and a ground covering of hydroseed. It also calls for years of herbicide use against invasive plants that will be encouraged by the extreme environmental disturbance created by the project itself. If revegetation of Summit Valley/ Ed Edelman Park is any example, the new plantings will also come with an extensive latticework of plastic irrigation pipes to ensure that no one will forget for an instant the human hand at work. No one has considered that visitors from urban areas might enjoy the varied exotic tree specimens thriving among the native ones, which afterall are well represented in Lower Topanga as in every Santa Monica Mountains park. Other parks have retained numerous examples of non-native trees. If this move is in preparation for the bigger restoration project ahead, it should surely be delayed until that project has been incorporated in a General Plan. Clearly, this loss will be a significant irreversible outcome prohibited by the Interim Plan.

From: Ron Schafer
To: Goode, Suzanne
Date: 2/6/2006 8:35:08 AM
Subject: Fwd: Berm removal

Suzanne,

This one is addressed to you but was not emailed to you. The plot thickens....

Ron

>>> "Herbert Petermann" <hpetermann@charter.net> 02/04/06 11:48 AM >>>

T A S C . TOPANGA ASSOCIATION FOR A SCENIC COMMUNITY

P.O. BOX 352, TOPANGA, CALIFORNIA

February 2nd, 2006

Ms. Suzanne Goode, State Parks Environmental Scientist

Angeles District
1925 Las Virgenes Road
Calabasas, California 91302

Dear Ms. Goode,

The board of the Topanga Association for a Scenic Community (TASC) strongly objects to the proposed Rodeo Grounds Berm Removal and Restoration Project after reviewing the Mitigated Negative Declaration and State Parks Lower Topanga Acquisition Interim Management Plan and EIR. There must be no further action until the contradiction between the proposed project and the Interim Management Plan is addressed by public review.

TASC, representing 800 members, has concerns about many aspects of the massive excavation and plant eradication proposal, which, at a minimum require further study in an EIR, as was done for Malibu Creek restoration. This project should be reserved for inclusion in a General Plan for the park so that it can be balanced against other priorities and so that legitimate controversies can be properly aired. This project would stir up 17,000 tons of hazardous materials within Topanga
Creek, requiring transport to distant classified disposal sites. On this point alone, it should be considered a significant environmental impact.

Moving forward with this plan at this time will potentially foreclose other options for the property, especially in areas that would require the berm road for access. During the general planning process, Rodeo Grounds Road would serve as an important trail access route to a beautiful section of the park and perhaps other connecting trails. This area should not be cut off to public access before alternative access is in place. Also, eliminating the berm, which once protected residents and their homes from dangerous floodwaters, could create a hazard for park visitors if a safety plan is not in place. These are only a few of TASC's many concerns about this project.

TASC, a well established Topanga community organization, was not consulted during preparation of the Mitigated Negative Declaration. Similarly, community requests for a public meeting on this unexpected and unfamiliar project were rejected, despite numerous provisions in CEQA that clearly place a high value on public input. Review materials were not provided locally or electronically via the Internet, substantially reducing public review opportunities. In every respect, this project appears to be a rush job designed to limit public involvement, which in turn could result in increased risk to residents and commuters as well as to the environment of the new state park. There are still many priorities to be accomplished in the Interim Plan. It's time for State Parks now to get started on the general planning process and create a true, comprehensive vision for this extraordinary park property.

Your immediate attention to this matter is requested.

Sincerely yours,

Roger Pugliese
Chair

Cc: Ron Schafer, State Parks Superintendent, Angeles District Santa Monica Mountains Resource Conservation District, Board Superintendent Zev Yaroslavsky; Shelley Luce, Executive Director, Santa Monica

Bay Restoration Commission

from Susan Chasen, concerned citizen, Topanga resident
310-455-2788

Comments on the Mitigated Negative Declaration for the Rodeo Grounds Berm Removal and Restoration Project

received 2/6/06 by Patti

Overview:

State Parks must prepare an EIR this project because the Mitigated Negative Declaration leaves numerous significant impacts that cannot be mitigated. This EIR should be part of a General Plan Amendment for the Lower Topanga State Park property. Now, more than four years since this property was acquired, this plan should have been in place long ago and certainly, an extensive excavation project such as this must not be allowed until a plan in completed. To do otherwise is to be preemptive of the public process, and to ignore CEQA requirements for examining cumulative impacts of this restoration project in relation to other creek and lagoon restoration goals.

First and foremost: This project which calls for removing a flood-control berm, a 520,000 cubic feet excavation project tainted with hazardous materials, violates the state-approved management plan for the property, far exceeding the limited number of "small projects" identified as priorities in the Lower Topanga Interim Management Plan and its accompanying EIR. This project is slated for study and planning only, until it can be considered in relation to a complete array of priorities in a future General Plan and EIR for the Park.

Please see references regarding streambed restoration, roadway removal and non-native plant removal on pages 37, 16 and 39, among others, in the Interim Plan.

This project, described as intended "to restore the natural floodplain, creek channel and sediment transport systems at the southern end of Topanga Creek" clearly stands in conflict with the scope of the Interim Plan and should be considered during the process for creating a General Plan for the park.

This MND review process violates the spirit of CEQA, and possibly the letter in the following ways:

A. Review time and locations – documents not available in Topanga
B. Electronic availability – documents not provided via Internet

C. Principal staff at both the lead agency, State Parks, and the collaborating, responsible agency, the Resource Conservation District of the Santa Monica Mountains, were not available to answer questions about process and about content during the comment period

This project is mischaracterized in numerous ways and contains misinformation.

Page I-1

A. The berm is described as the illegal work of former tenant residents of the property. Nowhere is the property owner and responsible party, LAACO Ltd, parent of the Los Angeles Athletic Club, mentioned regarding responsibility for the berm or its hazardous materials contents. This berm served to protect against flood hazards to LAACO's rental properties that at the time of the State Park purchase in 2001 were generating $750,000 in annual income. Incidentally, State Parks was supposed to have completed environmental testing to assure that liabilities such as disposal of these hazardous materials were not to add to the $43 million acquisition cost with additional $7 million so far in relocation expenses.

B. Steelhead trout will be able "to access four miles of suitable habitat that is now seasonally restricted due to the subsurface flows associated with the berm." There is no explanation of what it meant here by "subsurface flows" or how widening the creek area by removing the berm will not make the creek shallower and subject to drying for months out of the year as has always been the case along numerous stretches of Topanga Creek. As it is, most of the steelhead count is found upstream of the project site. There are no projections offered as to how this will be increased as long as the fish are limited by the sand bar downstream at the lagoon which prohibits them from entering or exiting most of the year. Also, the report does not address any notion of exactly what level of steelhead trout habitat Topanga Creek is believed to have been before PCH construction largely eliminated the lagoon access. The northern barrier, a steep formation of boulders about two miles upstream will remain unchanged by this project which occurs much further downstream near the coast. So, at best, the projected habitat improvements for steelhead are a combination of exaggeration and vagueness.
For example, "Ultimately, the project is expected to indirectly provide summer rearing habitat and improve over-winter habitat and critical passage links for the endangered southern steelhead trout." What does "indirectly" mean?

The MND does not: 1) characterize the Topanga Creek"s potential with respect to any quantifiable standard for an optimal steelhead population, which should be required since much effort has gone into including Topanga Creek within the steelhead's range. Previously the range was not believed to go this far south. While that might have been an error, it might also reflect this area as having only marginal potential in the urgent need to assure sustained southern steelhead populations.

Surrounding Uses I-1
C. The MND misstates the certainty of future removal of commercial uses along PCH. It states that only historic buildings will be retained as part of the park, without explaining that in at least two or three cases, these historic buildings are commercial enterprises that will likely be retained as visitor serving concessions. Other commercial enterprises, have not been deemed historic, and yet, State Parks has so far retained them as visitor serving and may continue to do so. One of the reasons identified in the Interim Plan for not pursuing lagoon and streambed restoration was potential impact on these business. Without an EIR to look at such things as 50 and 100-year storm events, one cannot determine what the potential downstream effects of this project might be.
In addition, severe landslides upstream almost completely close up the creek. How is it that a wider, slower section of creek, which is what is contemplated once the berm is removed, will not become clogged again with sediment both from the landslides and upstream development effects that were not problems in the early 1900s. Perhaps, the berm, as well as the homes, were initially built along an area that was generally pretty dry, with the berm only being built up in response to catastrophic storms or changed conditions upstream increasing the ferocity of floodwaters. In other words, consider why the houses were built there in the first place, not just the berm.

Statement of no-confidence in sensible prioritizing by local State Parks staff

A. During heated local controversy over State Parks' support of using herbicides to eliminate arundo instead of allowing local volunteers to do the job manually, or in coordination with bulldozers and other mechanical means, park staff used the argument that the footsteps of volunteers would potentially be a significant environmental impact. As it turned out, volunteers were permitted to do the job and successfully eliminated arundo from several areas. Now, not only is State Parks proposing an unrestrained use of herbicides to control an inevitable return of weeds from upstream, they propose countless bulldozer trips into the streambed and 2,000 trucks weighing 58 tons when full cycling through the riparian and floodplain zone.

LIST OF CONSULTED ORGANIZATIONS AND PUBLICATIONS
- Interim Plan is listed second to last
- Topanga Association for a Scenic Community is not consulted, nor other local groups like the emergency preparedness group TCEP

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

Out of 17 categories of factors potentially affected, State Parks acknowledges nine potential impacts, but contends they can all be mitigated to insignificance. This will be examined in detail below. So will three additional categories which State Parks improperly dismissed as having no potential impacts - aesthetics, recreation, and planning impacts are not acknowledged at all.
- Loss of more than 100 beautiful and shade-giving trees to be replaced with tiny seedlings, acorns and walnuts planted in tubes, and a ground covering of hydroseed are far from a sufficient replacement. The MND does not consider that park visitors from urban areas might benefit from seeing varied tree specimens in addition to native specimens that are well represented in Lower Topanga and every other Santa Monica Mountains Park. Eradicating non-native trees does not have a scientific justification (Please see attached Discover magazine cover story), but rather only a narrow aesthetic one that falls comfortably in the realm of public debate. State Parks does well to preserve natural habitat from destruction whenever possible. However, draconian "restoration" measure to eliminate existing tree resources in this case is a needless, pathological erasure of the Rodeo Grounds' legacy of holiday and residential use. It sounds like an uncomfortably ironic mandate: "You have to kill the environment in order to save it." Lower Topanga does not have cancer. It is a beautiful paradise. State Parks should relax, create and general plan for the park, and get off its fast track to grant dollars.
-This project isn't completed for almost two years, which will mean public access continues to be denied for six years from acquisition. Also, the project clearly conflicts with identified goals in the Interim Plan and is therefore preemptive of a future General Plan's public process.

A No-Impact finding is not supported by information cited.

Since there is no State Parks General Plan and EIR in place authorizing this work, but only an Interim Plan, which doesn't authorize it, an EIR is absolutely required if this project is to go forward.

ENVIRONMENTAL ANALYSIS:

Initial Study Checklist

1. **Aesthetics** - b) and c) are clearly significant impacts of this project. State Parks' reasoning is purely subjective, dismissing as a "more scenic" improvement the loss of more than 130 trees. This project:
    b. This project removes "more than 100 trees" and 36 to 42 native trees including a heritage cottonwood, beginning about 800 feet from PCH, a state scenic highway. The MND says "the project site is not **currently** visible from PCH." "Currently," refers to the fact that the MND's authors intend to eventually cut down the rest of the non-native trees on the property-- at which time it will be visible. This, even though no State Parks management plan authorizes such draconian measures. Also, State Parks is being disingenuous with respect to Topanga Canyon Boulevard. One of the goals actually contained in the Interim Plan, unlike the current project itself, is to pursue scenic highway status for Topanga Canyon Boulevard.
    c. This project degrades the existing visual character or quality of the site and its surroundings because the loss of 130 trees is a very valuable aesthetic resource in a public park. State Parks' pathological hostility toward harmless non-native tree species that pose no threat of invasion as is seen with certain problem plant

species like Arundo donax. Removal of beach and surf emblems like palm trees, as well as pines, eucalyptus and many more is not supported by the latest science which is attempting to curb this lagging trend to make habitats more a matter of eco-enforcement and eradication than wholesome preservation. (Please see attached Discover magazine cover story, May 2005.) State Parks must justify species by species why these aesthetically very valuable public resources should be summarily cut down and turned to waste.

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2. **Air Quality** – d) is a significant impact affecting sensitive receptors because the project is located close to a public school bus stop at the corner of Topanga Canyon Boulevard and PCH in the Malibu Feed Bin parking lot. That is where trucks filled with lead-contaminated dust will be idling, waiting at a long, at least 3 minutes, traffic light, and then accelerating onto PCH. The project would occur during June when school is in session. Similarly, beginning in June, the site is possibly used as a bus stop Calicamp.

Proposed Mitigation measures – Firstly, mitigations AQ1 and AQ6 are vague and merely propose a laundry list of options from watering to reduce fugitive dust two or three times daily to use of soil binders or chemical stabilizers. What do they expect to do? Soil stabilizers might present additional habitat concerns, particularly in the streambed. Same vagueness with the suggestion in AQ7 of reducing idling time "where possible" or utilizing non-diesel equipment "where available or feasible." Have they got an agreement with Caltrans to streamline them onto PCH? Do they know if trucks capable of carrying 24-ton loads and weighing 34 tons empty come in non-diesel models? Do they cost more and would that render them not feasible?

Discussion : State Parks' air quality mitigations in addition to being vague, also suggest a lot of ground water use. I would like to know where the onsite wells are and if all the proposed washing will wash contaminants back onto the ground.

Perhaps more important is the question of who will enforce these mitigations. A private developer would be subject to fines if complaints were made. What is to prevent a contractor working for State Parks from cutting corners if possible? How will State Parks' monitor that hazardous waste dirt ends up reaching its destination disposal facility? How can the citizen be informed who to turn to if excessive dust is ending up on Topanga Canyon Boulevard – a commuter route serving thousands daily, in hot weather when windows are down.

Also, there is a disparity between the estimated 1,100 trucks and the anticipated 50 truckloads daily for 40 days which comes to 2,000 trips.

3. **Biological Resources** – the MND identifies a) and b) as potential impacts requiring mitigations. However, mitigation, aimed principally at minimal replantings doesn't address all the significant impacts, including to steelhead trout the ostensible beneficiary of this project. It also makes no compensation for the loss of non-native vegetation, providing cover, shade, perches and food wildlife. This wholesale removal of non-native trees exceeds the Interim Plan goal (See page 12, action 1a) and was rejected among the EIR's alternatives considered because of erosion and wildlife impacts (page 39). Here are some specific failings of the MND in this category:

   a) Topanga Creek's already tiny steelhead trout population will be threatened during summer rearing which is described as taking place in this area. Therefore the timing of this project, summer 2007, is a significant impact.

   Also, the comments assert that subsurface creek flow will be restored to a surface creek flow without explaining how or why this will occur. The project appears to be widening the creek channel significantly. The potential for this to create shallower creek waters with longer dry periods is not addressed with respect to impact on steelhead.

b) Additional native tree species in the 10.5 acre riparian zone adjacent to the berm will be potentially significantly impacted by flood waters No mitigation measures are proposed for this area. There is no inventory of the potential losses in this zone. So this is a big unknown. The number and character of the native species over this area are not identified. In a flood, these trees would be subject to being carried downstream, creating obstructions and other hazards.
Also, replanting mitigations described for the 1.8 acre berm area, are a long way from replacing the 36 to 42 mature native species being removed – 20 acorns and nuts in tubes, stakes and cuttings, eight 10 gallon trees, and assorted seeds.

c) This category is wrongly identified in the no impact column. This is a potentially significant impact since wildlife patterns have not been mapped in the area. Now, with residents and residential structures removed, along with the extensive removal of more than 130 trees in this project, it is possible that more animals, including deer, unimpeded by customary constraints and searching for a replacement food source, will end up dying on Topanga Canyon Boulevard or causing accidents, less than 100 feet away over a long stretch of the project area.

Also, there will be significant impacts on a special bird for many birdwatchers, the Common Nighthawk, a Nightjar and a relative of the famous Whip-poor-will. The Rodeo Grounds is the only place where I have seen this bird. I've seen several in the evening there on more than one occasion. Some local birdwatchers who haven't seen this park, have never seen one. Also, local parrot flocks which are possibly despised as non-natives by some overzealous members of State Parks and RCD staff, are residents or frequent visitors, relying presumably in part on fruit trees. These birds are admired by the general public, who should have a say in these policies via a general planning process, which has been denied them. This project could eradicate them or drive them into more remote area. Many of our birds are naturalized exotics and State Parks should make a scientific case against their presence in this borderline urban/nature park location before eradicating them. (Please see the film "The Wild Parrots of Telegraph Hill).

f) MOST IMPORTANT SIGNIFICANT IMPACT – This project conflicts with provisions of an approved habitat conservation plan – the Interim Management Plan for Lower Topanga State Park. This plan forbids irreversible projects at this stage and favors a stabilizing approach until a general plan can be completed to address the property as a whole – balancing different public use needs and ambitious stream and lagoon restoration goals including this one.

Discussion: This project also calls for discrete, but ultimately unlimited, use of herbicides to kill weeds and non-natives attempting to be re-established in the project area. There is no discussion of alternative methods though this project occurs within a streambed and a wetland/riparian corridor. With many of these unwanted plants still plentiful upstream, there could be an unlimited use and re-use of chemical herbicides. Herbicide use, rejected in Topanga Canyon by Caltrans for roadwork, has been a huge local controversy and State Parks, a resource protecting agency has been more resistant to change than even a public works operation like Caltrans. Topangans in their own Watershed Management Plan attempt to discourage private herbicide use. State Parks' policies favoring herbicides threatened to undermine important local victories and to set precedents that will not serve the greater good of the environment.

6) Geology – No impacts are identified. And yet there is no discussion of the severe erosion potential during storm events. Local residents describe how the creek changes course and bangs up against the hillside as it makes a near 90-degree turn at the north end of the project area. This threatens to create more landslides like those already located upstream – a potentially significant impact.

7) Hazards and Hazardous Materials – An EIR must address how removal of 17,000 tons of lead contaminated dirt spread over the length of the entire project area will be prevented from being stirred up in the excavation process. Will there be water exposed during excavation? If so how will these chemicals be kept from entering either the creek or groundwater. If groundwater is to be pumped and used to control fugitive dust, how will lead contaminated soil be prevented from being washed onto the ground? It is not enough to say, in effect, "all regulations will be followed," when it comes to safety concerns of handling hazardous waste. How will a tiny agency, inexperienced in these matters, like the RCD, ensure that truckloads of hazardous waste materials reach their distant disposal facilities. A private developer would be subject to fines and enforcement action if regulations are not complied with. What measures are in place to ensure that State Parks will enforce regulations and promised handling procedures? A less rushed project with a completed EIR would assure the public that these materials are being handled properly. In addition the MND fails to consider the following:

> b) Releasing contaminated dirt into Topanga Creek and to the ocean just a little ways downstream is only avoided in the MND by existing regulations. This is an invisible contaminant being stirred up in a streambed. Are there oversight and response procedures to ensure that these contaminants don't end up in the creek, the ocean or in the local soil or beach?
>
> c)There is a school bus stop at the Malibu Feed Bin at the Topanga Canyon and PCH intersection. Fugitive lead dust would be an environmental hazard to Topanga middle school and high school students who ride the bus. It also might be a bus stop for Calicamp, carrying younger children.

8. Hydrology and Water Quality – EIR required to examine several potential significant impacts not addressed and/or not mitigated

b)A significant amount of groundwater will be pumped to control dust on the project site, and the streambed itself is going to be excavated to the point were subsurface water will purported run above ground. There is no data in the MND to quantify the potential of these impacts. Fifty trucks will be hosed down daily and a long newly established service loop road will be kept moistened as well as stockpiles and the excavation site itself to reduce fugitive lead contaminated dust. How runoff from these projects will avoid spreading lead is not addressed.

c)See above comment #6 Geology

f)See above comment #7 Hazards, intro paragraph

i) MOST IMPORTANT – This project could expose people to risk of injury or death from flooding, including flooding resulting from the failure of a levee or dam. This should be address in an EIR and a parks General Plan to ensure the safety of park visitors during floods on this site which have taken lives in the past.
The berm was initially established to protect people and property from flood danger which took the lives of five people in Lower Topanga and Topanga in 1969. The hazards to future park visitors should certainly be addressed in an EIR before the berm itself is removed. This represents a clearly significant impact of removing the berm. (See also, Project Background page I-4, for discussion of why the berm was erected)
Also, it seems relevant to consider that there have been significant changes upstream that affect the storm water flow in the Rodeo Grounds. This was not a threat when the homes were built initially. That's why they were built there. The berm was built in response to increased threat from floodwaters.

9) Land Use and Planning – The MND does not address item 9b at all, even though it clearly represents a significant impact requiring not only and EIR but a General Plan for Lower Topanga State Park as well.

b) The MND falsifies the goals in the Lower Topanga Canyon Interim Management Plan which sets much more modest goals and action items than represented by this project. It specifically rejects starting on restoration projects of this scale. (See page 37 et al) As a result, this project utterly lacks public review and approval which is conferred by the Interim Plan. Creek and lagoon restoration projects are only listed in the Interim Plan as study and planning items (See page 16, action 1h and page 58). Nowhere does an action item anticipate moving forward with implementation of streambed or lagoon restoration.

Consultation of the Interim Plan appears to have been an afterthought, judging by its placement at the bottom of the consulted publications list. From there, language in the Interim Plan, specifically forbidding road removal and restoration (See page 15, action 1f) as well as postponement of creek and lagoon restoration until a general plan is completed, was ignored or occasionally distorted to accommodate this project proposal.

14. Recreation – Further delay to public use of this property — six years after acquisition - represents a significant impact requiring and EIR and a General Plan.

a) Since this parkland was acquired to serve "park-starved Los Angeles as a justification in Prop 12, it stand to reason that failure to open it or to even create a comprehensive General Plan for it creates added burdens on existing park facilities. Creating a general plan should have been State Parks top priority after acquiring it. This project further delays not only public use of that area, but the much needed planning process as well. It appears that State Parks is attempting to avoid creating a General Plan by moving forward on grant driven projects beyond the scope of its Interim Plan.

tend to dwarf this one, that is only testament to how massive those projects are. It is no excuse for minimizing the impacts of this project - a 520,000 cubic feet excavation, 2,000 trucks and at least 130 trees cut down - proposed during an Interim period. The Interim Plan requires only reversible projects and puts forth a general priority of "stabilizing the environment" until a General Plan with public input and review in place.

APPENDIX B
Air Quality

Giroux & Associates
Environmental Consultants

AIR QUALITY IMPACT ANALYSIS

RODEO BERM REMOVAL PROJECT

LOS ANGELES COUNTY , CALIFORNIA

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Project No.: P06-081A

Date:

August 31, 2006

CLIMATE AND METEOROLOGY

REGIONAL CLIMATE

The North Pacific high-pressure cell is the dominant climatic influence over the eastern North Pacific Ocean, particularly during the summer months. This high-pressure cell produces a predominantly northwesterly flow of maritime air over the California coastal waters. During the winter, the Pacific High weakens and moves south, resulting in weaker and less persistent northwesterly winds along the California coast than in the warmer half of the year.

As the air mass approaches the coast of California, this large-scale circulation pattern is modified by local influences. The differential heating between the desert and the adjacent Pacific Ocean modifies the prevailing winds, enhancing them during the warmer half of the year and weakening the winds during the colder portion. On a local and sub-regional basis, the airflow in California is channeled by its mountain ranges and valleys. The coastal mountain ranges limit the flow of maritime air into the interior of California. This transition from a cool and damp marine environment to a dry and warm continental climate therefore occurs over a fairly short distance.

SOUTH COAST AIR BASIN

The South Coast Air Basin (SCAB) is a 6,600 square mile coastal plain bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Basin-wide conditions are characterized by warm summers, mild winters, infrequent rainfall, moderate onshore daytime breezes, and moderate humidity levels.

All seasons generally exhibit onshore flows during the day and offshore flows at night, after the land cools below the temperature of the ocean. The likelihood of strong offshore flows, including Santa Ana winds, is greater during winter than during summer (California Air Resources Board [ARB] 1984).

The topography and climate of Southern California combine to produce unhealthful air quality in the SCAB. Low temperature inversions, light winds, shallow vertical mixing, and extensive sunlight, in conjunction with topographical features such as adjacent mountain ranges that hinder dispersion of air pollutants, combine to create degraded quality, especially in inland valleys of the basin.

AIR QUALITY SETTING

AMBIENT AIR QUALITY STANDARDS (AAQS)

In order to gauge the significance of the air quality impacts of the proposed Rodeo Berm Removal Project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In 2003, the Environmental Protection Agency (EPA) adopted a rule that extended and established a new attainment deadline for ozone for the year 2021. Because the State of California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1. Sources and health effects of various pollutants are shown in Table 2.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. In 1997 EPA developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5").

Planning and enforcement of the federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision, the U.S. Supreme Court ruled that EPA did not require specific congressional authorization to adopt national clean air standards. The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their respective attainment schedules. Such attainment-planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA subsequently agreed to downgrade the attainment designation for a large number of communities to "non-attainment" for the 8-hour ozone standard. Because the South Coast Air Basin is far from attaining the 1-hour federal standard, the 8-hour ozone non-attainment designation will not substantially alter the attainment planning process. The compliance deadline for the 8-hour ozone standard has been extended to 2021.

Table 1

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O_3)	1 Hour	0.09 ppm (180 μg/m³)	Ultraviolet Photometry	0.12 ppm (235 μg/m³)	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (140 μg/m³)		0.08 ppm (157 μg/m³)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 μg/m³	Gravimetric or Beta Attenuation	150 μg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 μg/m³		50 μg/m³		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		65 μg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 μg/m³	Gravimetric or Beta Attenuation	15 μg/m³		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		–	–	–
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	(new standard pending)	Gas Phase Chemiluminescence	0.053 ppm (100 μg/m³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.25 ppm (470 μg/m³)		–		
Lead	30-Day average	1.5 μg/m³	Atomic Absorption	–	–	–
	Calendar Quarter	–		1.5 μg/m³	Same as Primary Standard	High Volume Sampler and Atomic Absorption
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	Ultraviolet Fluorescence	0.030 ppm (80 μg/m³)	–	Spectrophotometry (Pararosaniline Method)
	24 Hour	0.04 ppm (105 μg/m³)		0.14 ppm (365 μg/m³)	–	
	3 Hour	–		–	0.5 ppm (1,300 μg/m³)	
	1 Hour	0.25 ppm (655 μg/m³)		–	–	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer–visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates	24 Hour	25 μg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride	24 Hour	0.01 ppm (26 μg/m³)	Gas Chromatography			

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Table 2

Health Effects of Major Criteria Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter.	• Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	• Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions.	• Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	• Contaminated soil.	• Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	• Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions.	• Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	• Fuel combustion in motor vehicles, equipment, and industrial sources: • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.	• Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Evaluation of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted on June 20, 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard, but only requires continued progress towards attainment.

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new state standard for an 8-hour ozone exposure was adopted in April 2005, which mirrors the federal standard. The California 8-hour ozone standard of 0.07 ppm is more stringent than the federal 8-hour standard of 0.08 ppm. The state standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress toward attaining state standards, but there are no hard deadlines or any consequences of non-attainment. Similarly, a new State AAQS for NO_2 has been proposed for adoption that is more stringent than the federal standard.

Of the standards shown in Table 1, those for ozone (O_3), carbon monoxide (CO), and particulate matter (PM-10) are exceeded at times in the South Coast Air Basin. They are called "non-attainment pollutants." The CO standard is currently met in the basin, and re-designation to "attainment/maintenance" is anticipated shortly. Because of the variations in both the regional meteorology and in area-wide differences in levels of air pollution emissions, patterns of non-attainment have strong spatial and temporal differences. The number and severity of violations of clean air standards along Santa Monica Bay are much less than in other parts of the basin.

BASELINE AIR QUALITY

Existing levels of ambient air quality and historical trends and projections in the project area are well documented from measurements made by the South Coast Air Quality Management District (SCAQMD). Closest to the project site is the West Los Angeles monitoring station, and is therefore the most representative of the project area air quality. PM-10 data is not measured at the West Los Angeles station but it is measured at the next closest SCAQMD monitoring station in Hawthorne. Because neither station measures PM-2.5, measurements for PM-2.5 were not included in this study. Table 3 is a 5-year summary of monitoring data for the major air pollutants compiled from the two air monitoring stations.

Ozone and particulates are seen to be the two most significant air quality concerns. Ozone, the primary ingredient in photochemical smog, is obviously an important pollution problem in the Los Angeles basin. However, in West Los Angeles, only once in the past five years was there a violation of the national hourly ozone standard. Less than 2 percent of all days exceed the California one-hour standard. The federal 8-hour standard is has been exceeded only two times in the last five years. While the hourly maximum was highest in 2003, the year 2004 shows significant improvement. The coastal area ozone air quality problem is much less severe than in the greater Los Angeles air basin.

The project area also experiences frequent violations of standards for 10-micron diameter respirable particulate matter (PM-10). High dust levels occur during Santa Ana wind conditions, as well as from the trapped accumulation of soot, roadway dust and byproducts of atmospheric

Table 3

Air Quality Monitoring Summary
(Days Standards Were Exceeded and Maximum Observed Concentrations)

Pollutant/Standard	2000	2001	2002	2003	2004
Ozone					
1-hour > 0.09 ppm (S)	2	1	1	11	5
1-hour > 0.12 ppm (F)	0	0	0	1	0
8-hour > 0.08 ppm (F)	0	0	0	1	1
Max 1-hour Conc. (ppm)	0.100	0.099	0.118	0.134	0.107
Carbon Monoxide					
1-hour > 20. ppm (S)	0	0	0	0	0
8- Hour > 9. ppm (S,F)	0	0	0	0	0
Max 1-hour Conc. (ppm)	6.0	4.0	4.0	5.0	4.0
Max 8-hour Conc. (ppm)	4.3	3.0	2.7	2.7	2.3
Nitrogen Dioxide					
1-hour > 0.25 ppm (S)	0	0	0	0	0
Max 1-hour Conc. (ppm)	0.16	0.11	0.11	0.12	0.09
Respirable Particulates (PM-10)					
24-Hour > 50 $\mu g/m^3$ (S)	9/57	8/58	12/61	3/61	2/15
24-Hour > 150 $\mu g/m^3$ (F)	0	0	0	0	0
Max. 24-Hr. Conc. ($\mu g/m^3$)	74	75	121	58	52

(S) - State ambient standard; (F) - Federal ambient standard

Source: California Air Resources Board (ARB)
Data: West Los Angeles: Ozone, CO, NOx
Hawthorne: PM-10

chemical reactions during warm season days with poor visibility. Table 3 shows that almost 14 percent of all days in the last five years in Hawthorne experienced a violation of the State PM-10 standard. However, the three-times less stringent federal standard has not been exceeded in the past five years. The maximum 24-hour PM-10 concentration appears to be declining following a spike in 2002.

AIR QUALITY IMPACT

STANDARDS OF SIGNIFICANCE

Many air quality impacts that result from the dispersed mobile sources, i.e., the dominant pollution generators in the basin, often occur hours later and miles away after photochemical processes have converted the primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally immeasurably small. The SCAQMD has therefore developed suggested significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. Any projects in the SCAB with daily emissions that exceed any of the following thresholds are recommended by the SCAQMD to be considered individually and cumulatively significant:

SCAQMD Emissions Significance Thresholds
(pounds per day)

Pollutant	Construction	Operations
ROG	75	55
NOx	100	55
CO	550	550
PM-10	150	150
SOx	150	150

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the Federal or State ambient air quality standards by either violating or contributing to an existing or projected air quality violation.
- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP.
- Project could generate vehicle trips that cause a CO hot spot.
- Project might have the potential to create or be subjected to objectionable odors.
- Project could have hazardous materials on site and could result in an accidental release of air toxic emissions.
- Project could emit an air toxic contaminant regulated by District rules or that is on a federal or State air toxic list.
- Project could involve disposal of hazardous waste.
- Project could be occupied by sensitive receptors near a facility that emits air toxics or near CO hot spots.
- Project could emit carcinogenic air contaminants that could pose a cancer risk.

The proposed project will entail the removal of soil, some of which may be lead-contaminated. However, the lead particles are heavy and are not prone to becoming airborne. Except for exhaust from excavation equipment and on-road trucks, toxic air contaminants are not expected to be a project issue. There are no post-removal air quality impacts. Any potential air quality impacts would thus derive mainly from "criteria" air pollutants during removal operations with significance thresholds outlined above.

CONSTRUCTION IMPACT

FUGITIVE DUST (PM-10)

Dust (PM-10) emissions will be generated from on-site excavation and truck loading, from export of fill material via haul trucks, and from off-site placement and compaction of the exported material. PM-10 emission factors for construction activities are notoriously imprecise. For purposes of analysis, it has been assumed that the average daily excavation and subsequent disposal area totals two (2) acres on any given day. A maximum activity day was assumed to move 1,000 cubic yards, requiring 50 daily truck-loads of earth hauling.

In the absence of definitive data on silt content, soil moisture, wind speeds, etc., the "default" PM-10 emissions data from the SCAQMD CEQA Air Quality Handbook were used to calculate daily PM-10 emissions. These factors, from Table A9-9 of the handbook, are as follows:

Grading and Fill Placement	10.0 lbs/day/acre
Truck Loading/Unloading	0.031 lbs/ton

Daily PM-10 emissions are estimated as follows:

Excavation & Disposal	2 acres x 10 lb/acre	= 20.0 lbs/day
Truck Loading/Dumping	1,300 tons x 0.031 lbs/ton	= 40.3 lbs/day
Total		= 60.3 lbs/day

PM-10 emissions will be less than the 150 pound per day significance threshold. However, the non-attainment status of the air basin for PM-10, the rules of the SCAQMD (Rule 403), and the presence of dust-sensitive land uses near the project site all require that best available control measures (BACM's) for dust be used during berm removal. The matrix of recommended dust control measures is included in the mitigation section.

CONSTRUCTION EQUIPMENT EXHAUST

The disposal site will vary with the level of contamination of the excavated material. "Clean" material will be trucked to a landfill in Los Angeles County. Contaminated material will require disposal at a hazardous waste repository in the San Joaquin Valley or at desert locations in Riverside or Imperial Counties. The distance of daily hauling and associated air pollution emissions depends upon the currently unknown split between clean versus contaminated materials.

On-site equipment to extract the material and load the trucks was assumed to use a rubber-tired dozer and a rubber tired loader. At the unloading end, the material was assumed to be pushed by a dozer and compacted with a compactor. A water truck will provide dust suppression at both travel ends. A split of two thirds/one third was assumed between clean and contaminated dirt in the absence of any precise knowledge on travel splits. A 30 mile round trip distance for clean fill disposal was assumed. A 40 mile one-way distance was assumed for contaminated fill disposal before the truck leaves the air basin. The total daily disposal travel distance was estimated as follows:

Clean fill	33 loads x 30 miles/round trip	= 990 miles
Contaminated fill	17 loads x 80 miles/round trip	= 1,366 miles
Total		= 2,350 miles

Peak daily air pollution emissions were calculated by combining emission factors from the SCAQMD construction emissions web site (off-road), and the EMFAC2002 computer model (on-road), and comparing the resulting emissions to the applicable SCAQMD significance thresholds.

Peak daily project related emissions, shown in Table 4, will be below the SCAQMD CEQA significance threshold for all pollutants. NOx emissions will be near the threshold and could exceed the threshold if the bulk of the excavated material is contaminated and must be hauled for longer distances. Both because of the non-attainment status of the air basin and the small margin of NOx safety, reasonably available control measures for NOx emissions are recommended.

Table 4

Maximum Project Construction Activity Emissions (lb/day)

Construction Sources	Emissions (lb/day)				
	CO	NOx	PM-10	SOx	ROG
Dozers – 6 hours	6.6	17.5	0.7	2.7	1.3
Loader – 4 hours	1.7	4.7	0.3	0.9	0.4
Compactor 2 hours	1.4	14.0	0.2	0.6	0.4
Water trucks - 10 hours	1.7	0.3	<1	<1	0.2
Total Equipment	11.4	26.5	1.2	4.2	2.3
Employee Commute – 5,000 mi.	7.0	0.7	<1	<1	0.7
Fugitive Dust - 2 acres	-	-	2.0	-	-
Haul Trucks – 2,350 mi.	52.5	69.3	1.9	-	6.0
Project Total	70.9	96.5	3.1	4.2	9.0
SCAQMD Threshold	550.	100.	150.	150.	75.
Exceeds (?)	No	No	No	No	No

Source: SCAQMD Web Site (CEQA) for off-road equipment
California ARB MVE17G for on-road sources

MITIGATION

Project-related air pollution emissions during removal of the berm will not exceed SCAQMD CEQA thresholds based upon reasonable assumptions of off-road equipment use and on-road hauling distances. NOx exhaust emissions may, however, approach the threshold. The non-attainment status of the air basin for photochemical smog and the proximity of pollution-sensitive uses near the project site, as well as the possibly small margin of safety for NOx, all suggest that an enhanced level of impact mitigation should be implemented. The recommended matrix of dust and exhaust emissions is as follows:

Fugitive Dust:

- Use low pollutant-emitting construction equipment where/when feasible.
- Use oxidation catalyst equipped diesel-powered equipment if such equipment is economically available.
- Water the construction area twice daily (preferably four times) to minimize fugitive dust.
- Stabilize (for example, hydroseed) graded areas as quickly as possible to minimize dust.
- Implement track-out control as follows:
    - Apply chemical stabilizer or pave the last 100 feet of internal travel path within a construction site prior to public road entry.
    - Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads.
    - Remove any visible track-out into traveled public streets within 30 minutes of occurrence.
    - Wet wash the construction access point at the end of each workday if any vehicle travel on unpaved surfaces has occurred.
    - Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads.
- Cover haul trucks or maintain at least 12 inches of freeboard to reduce blow off during hauling.
- Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 mph.
- Enforce a 15 mph speed limit on all unpaved surfaces at a construction site.

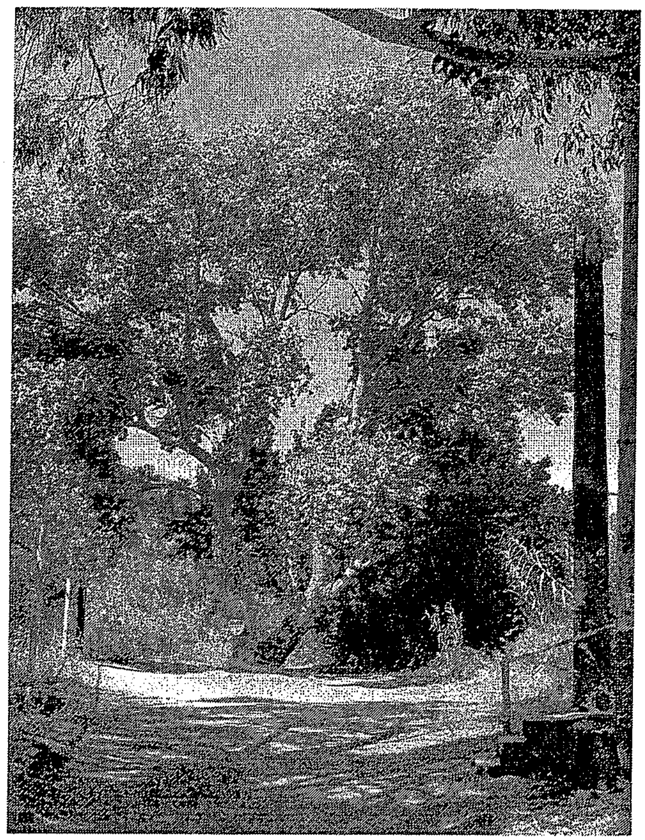
Equipment NOx Emissions:

NOx emissions may temporarily approach the daily significance threshold. Any off-road equipment operating on the berm-removal site with engine power output exceeding 100 horse-power should be equipped with Tier 3-rated engines that limit combined NOx and ROG emissions to 3.0 grams per horsepower-hour of power output.

APPENDIX C
Biological Resources Reports

RODEO GROUNDS BERM REMOVAL PROJECT

OAK TREE REPORT
AND
NATIVE TREE PRESERVATION AND REMOVAL PLAN



Provided to:
CA Department of Parks and Recreation, Angeles District
1925 Las Virgenes Road, Calabasas, CA 91302

Provided by:
Rosi Dagit, Sr. Conservation Biologist
Certified Arborist #1054
RCD of the Santa Monica Mountains
122 N. Topanga Canyon Blvd. Topanga, CA 90290

AUGUST 2006

SUMMARY

In order to remove the fill materials of the Rodeo Grounds Berm and restore the floodplain and channel of Topanga Creek, it will be necessary to remove the following native trees that are growing into the berm:

- Approximately 30 willows (*Salix sp.)* of varying sizes
- Two toyon (*Heteromeles arbutifolia*)
- One elderberry (*Sambucus mexicanus*)
- One coast live oak (*Quercus agrifolia*) Tree #1
- One heritage cottonwood (*Populus fremontii*) Tree #2
- One CA walnut (*Juglans californica*) Tree #3

Both the California Coastal Commission and the California Department of Fish and Game will require mitigation for the loss of these native trees. Since the goal of this project is to restore the natural floodplain and restore the riparian corridor, the mitigation plantings will be included in the more comprehensive Revegetation and Restoration Plan. At minimum, the mitigation planting proposed include:

- five one gallon coast live oaks, 10 acorns in tree tubes
- 15 cuttings propagated from the cottonwood
- three one gallon walnuts, 10 nuts planted in tree tubes
- 100 willow stake cuttings
- 10 one gallon toyon
- 10 one gallon elderberry

Due to their location within the grouted rip rap, and on top of the fill bed, it does not appear possible to retain either the 12 inch diameter coast live oak (#1), or the small CA walnut tree (#3) growing on the top of the berm near the cottonwood.

Retention of the mature cottonwood (#2), which has been buried in 14 feet of fill material since at least 1970 will be difficult, if not impossible. Preliminary examination of the trunk at ground level indicates that over 80% is decayed to some degree. The tree is showing evidence of widespread rot, including oozing, branch loss, twig dieback, and fruiting bodies on old branch wounds.

Typically, trunks buried in fill become structurally compromised and fail once the surrounding fill is removed. Adventitious roots along the trunk would also be cut in order to remove the fill to original grade, further compromising the structural stability and health of the tree. Finally, the tree will be located within a restored floodplain and subject to potential creek channel adjustments and the force of storm flows.

Additional exploratory excavation by a qualified arborist should be performed during the berm removal in order to assess the condition of the trunk prior to implementation of any tree preservation strategies. If the trunk is further compromised within the top 3 feet of the berm fill, it can be assumed that it will probably fail once the berm is removed. If it is sound, then additional excavation may be performed and the preservation strategies implemented.

Retention of the two mature sycamore trees (#5, #6) located towards the northwest end of the berm, as well as the one (#4) near the cottonwood, should be attempted, as long as it is possible to retain islands of fill surrounding the main root ball and the trees appear stable.

Since the excavation route may need to extend towards the southwest, an additional three sycamores (#7, #8, #9) will also be close to the removal zone. Given the location of these trees on a small rise just north of the material that will be removed, there is not expected to be any impact to these trees.

Since there will be no direct targets in the creek, California Department of Parks and Recreation can then decide to a) remove the cottonwood (#2) and sycamore tree (#4) during the berm excavation; or b) allow the cottonwood and sycamore tree to fail and fall, providing large woody debris in the restored floodplain area.

BACKGROUND

The Rodeo Grounds Road Berm was installed without plans or permits by tenants of floodplain structures to protect their rental homes from flooding. It is located approximately 2,500 feet upstream from the ocean on Topanga Creek, and covers 1.8 acres. It was built in at least 2 stages, re-aligning and replacing a lower, smaller dirt road that had been installed in the 1920's. According to local residents, asphalt and paving from the Lincoln Blvd. re-paving project were placed on the site in the late 1960's. Additional road spoils from throughout the watershed were added to raise the berm higher following the 1980 flood. Since the property was incorporated into Topanga State Park in 2001, the structures are being removed. It is anticipated that all the structures currently protected by the berm will be removed prior to the start of this project.

The presence of mature trees near this location is evident in aerial photographs dating back to 1928. It is not possible, given the resolution of the existing aerial photos, to determine if the canopies visible in the photos are the same trees as currently exist, or not. Several historic aerial photos are included in Appendix A showing the approximate current location of trees addressed in this report.

According to local residents, the trunk of the cottonwood tree was buried in the fill as it was placed. Based on the anecdotal reports, the fill material is approximately 14 feet deep to the original creek level and root crown of the cottonwood tree. This depth is supported by auger drilled bore hole data gathered on 17 February 2005, when a soil characterization study was conducted. Borehole #1 was located just outside the dripline of the cottonwood tree on the south side.

In order to restore the floodplain and channel of Topanga Creek to its original configuration, the berm needs to be removed. Removal will restore the natural creek channel, restore over 12 acres of wetland/ riparian floodplain, allow storm generated removal of sediment build up, and restore above surface creek flow to provide summer rearing habitat, as well as improve over-winter habitat and critical passage links for endangered southern steelhead trout between the main stem of Topanga Creek and the ocean.

It is the intention of California Department of Parks and Recreation (CDPR) to preserve the cottonwood and sycamore trees if at all possible. This report provides recommendations for protecting the tree during the berm removal excavation, supporting the trunk should that be warranted, and/or removing the tree if it is determined to be a hazard and impossible to retain.

ASSIGNMENT
Removal of the berm requires preparation and compliance with all pertinent California Environmental Quality Act (CEQA) regulations, especially those relating to protection of native riparian communities. It was determined that a report describing impacts to existing native trees and possible opportunities to avoid or mitigate these impacts was needed for inclusion with the Mitigated Negative Declaration (MND) being prepared for the Rodeo Grounds Berm Removal Project.

The assignment was:

- to identify all native trees within and on the banks of the berm that might be impacted by the proposed excavation;
- evaluate which trees could be retained and which needed to be removed;
- examine the condition and possible retention of the mature cottonwood;
- provide recommendations for protecting trees to remain during the berm removal; and,
- develop appropriate mitigation strategies for any native trees lost.

This evaluation was limited by the inability to excavate the fill material around the mature cottonwood tree to determine how deep the observed ground level decay extends.

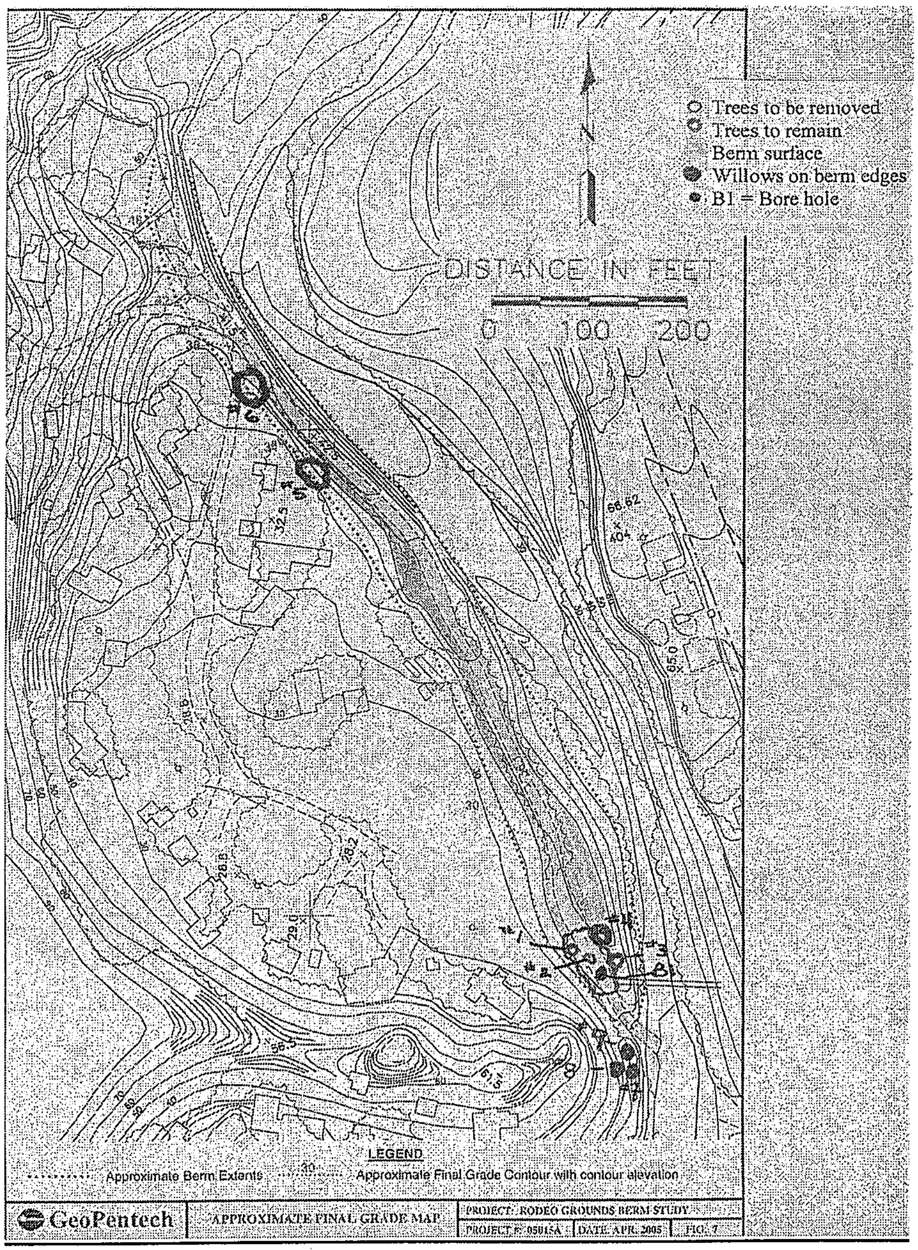
PURPOSE AND USE OF REPORT
The purpose of this report is to document the visual condition of mature native trees growing in the fill banks, identify those that will need to be removed, and to provide recommendations on ways to retain as many as possible, once the fill is removed. It also provides recommended mitigations and tree protection strategies to meet requirements of the California Coastal Commission and California Department of Fish and Game Streambed Alteration Permit (1044).

OBSERVATIONS
Field measurements for the coast live oak and sycamores were taken on 21 September 2005. The mature cottonwood tree was visually examined on 14 April, 21 September and 14 November 2005. Standard measurements and data on tree condition were evaluated using the standard for evaluating tree condition format of the International Society of Arboriculture, Guide to Appraisal of Landscape Plants, 2000. A summary of the field notes is included in Appendix B. Preliminary examination of the trunk/ground interface of the cottonwood for soundness was done with hammer and chisel.

Site location: The trees are located in or adjacent to an illegally constructed fill berm, which bisects the floodplain of Topanga Creek, approximately 2,500 feet upstream from the ocean. The berm is heavily compacted but not paved, allowing some infiltration of rainfall. The east bank is armored with riprap and gunnite sheets that have been overgrown with mulefat, willow and a mix of exotic herbaceous plants. The west bank is less visibly armored,

Over the years, a mix of native and non-native trees, shrubs and herbaceous plants have become established on the banks of the berm. Removal of all non-native trees and *Arundo donax* on the berm is envisioned. Of the native trees, willows are dominant, followed by sycamores, with individual elderberry, toyon and CA walnut trees found as well.

Figure 1. Location of Trees in the Rodeo Grounds Road Berm Project



Trees to be Removed:

- Approximately 30 willows (*Salix sp.)* of varying sizes
- Two toyon (*Heteromeles arbutifolia*)
- One elderberry (*Sambucus mexicanus*)
- One coast live oak (*Quercus agrifolia*) Tree #1
- One heritage cottonwood (*Populus fremontii*) Tree #2
- One CA walnut (*Juglans californica*) Tree # 3

While each of the individual willows, toyon and elderberry are important, their location within the grouted riprap along the edges of the berm make it impossible to salvage them when removing the fill. These are species common to the riparian zone of Topanga Creek, and are fast growing. Prior to their removal, cuttings will be harvested and grown into replacement trees that will be planted back on the site. Specific information is provided for the coast live oak, walnut and cottonwood, as each of these species is either unusual or identified as significant by local and state authorities.

Tree #1. Coast Live Oak (*Quercus agrifolia*)

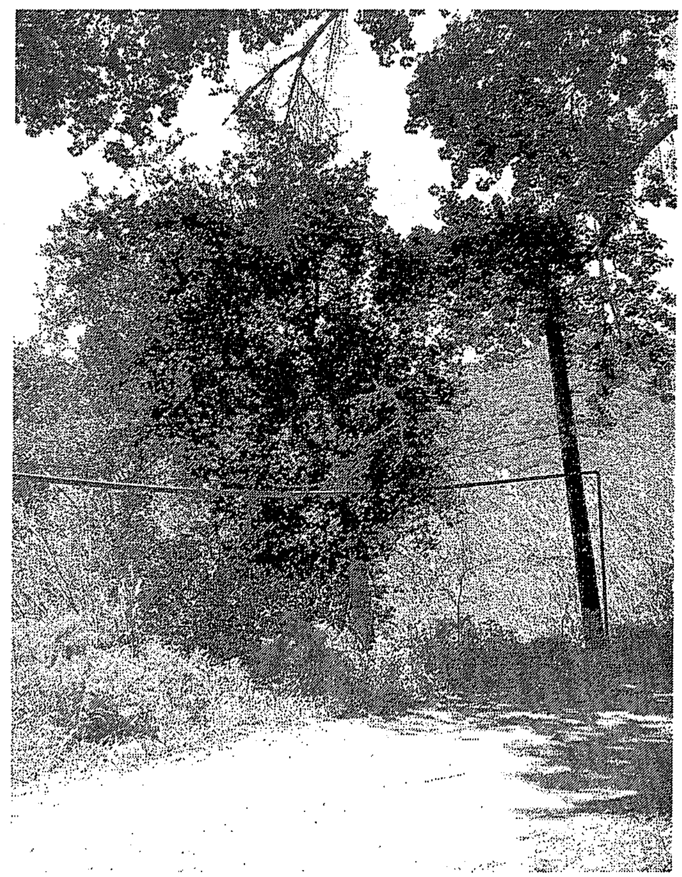


Figure 2. Tree # 1, Coast Live Oak

Site condition: Located on the upper edge of the west bank of fill material, directly under the canopy of the mature cottonwood.

Understory vegetation: Mixed grasses, arundo and small willows

Subject Tree Observations: Coast live oaks are common riparian trees in the Topanga Creek watershed.
Diameter at Standard Height (4.5 feet above grade): 12.2 inches
Height: 30 feet
Canopy spread: 20 feet
Condition rating: Good – 72%
Pests and diseases: No significant problems

Reason for Removal: Given the location at the upper edge of the fill material, it will not be possible for the tree to remain once the fill material is removed. Although the tree is in good condition, moving the tree is not recommended, as this is costly, would require significant investment in long term maintenance, and has a high incidence of failure.

Tree # 2. Cottonwood (*Populus fremontii*)

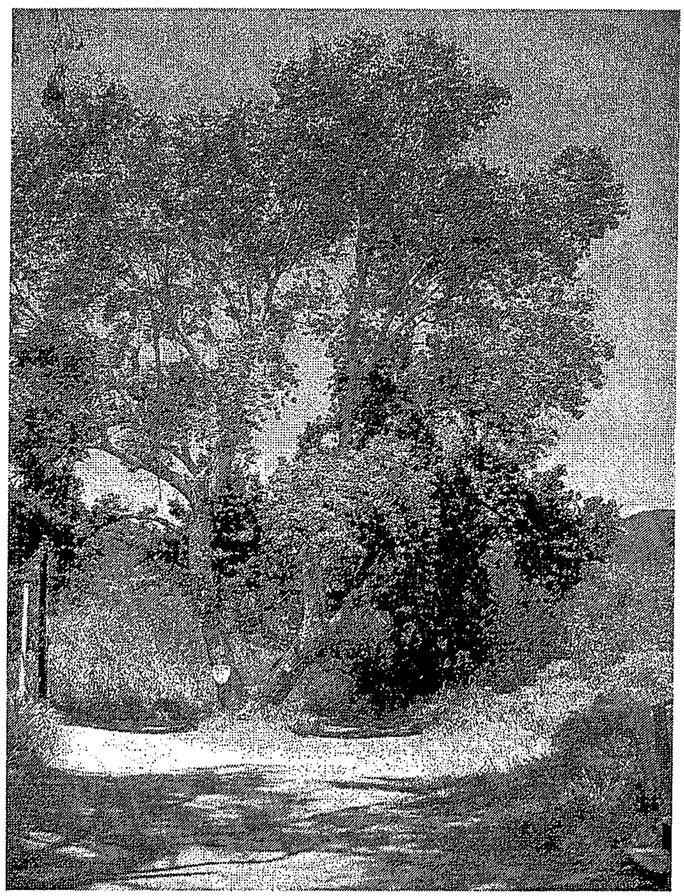


Figure 3. Tree # 2 Mature Cottonwood, south side April 2005

Site condition: It is located totally within the fill, and is approximately 50 feet from the edge of the creek on the east, and approximately 100 feet from the channel to the south.

Understory vegetation: There is a small circle approximately 3-6 feet in diameter around the trunk where non-native grasses are growing. The rest of the area under the dripline is compacted fill on the berm. Native willows and mulefat and one coast live oak are found within the perimeter of the dripline.

Subject Tree Observations: The mature cottonwood (*Populus fremontii*) is uncommon in the Topanga Creek watershed, although considered native to the region.
Diameter at Standard Height (4.5 feet above grade): 82.5 inches (45.4 inches on east main branch, 37.1 inches on the west main branch.)
Diameter at ground level: 70.2 inches (This is the main trunk diameter at current grade).
Height: 85 feet
Canopy spread: 60 feet
Condition Rating: Poor – 44%
Pests and Diseases: Over 80% of the trunk showed evidence of decay at the ground level, with additional evidence of widespread rot apparent in exudations, branch failure, twig dieback, foliage covered with brown spots, and fruiting bodies in old wounds.

Reason for Removal: The trunk of this tree has been buried in over 14 feet of fill since at least 1969. Preliminary evaluation of the trunk/ground interface indicates widespread decay. Additional evaluation at the time of excavation should be attempted to characterize the structural stability of the trunk further below ground, and the decision for removal made at that time.

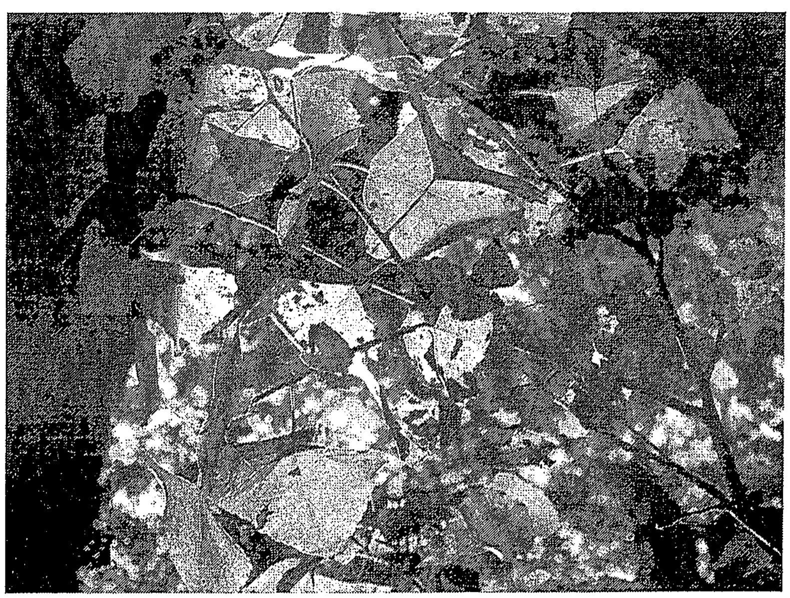
Structural Condition: It was not possible to evaluate the structural condition of either the main trunk or the roots, as they are buried in fill. Therefore this condition rating reflects only the structural condition of the scaffold branches which have effectively become the trunks, and the canopy.

There are several large broken branches in the upper canopy, which could be the result of wind damage. There are also several dead branches in the canopy. The distribution of vertical branches is typical of the species. Many of the larger branch attachments have included bark. The branches that failed did so outside the branch collar, leaving shredded stubs subject to decay. Wounds from recently pruned branches have not yet begun to form wound wood, although old scars are well covered. The crown is open, with approximately 60% cover and there are a few signs of the start of mainstem dieback.

Health: Exudations located at areas of included bark, as well as along the side of the eastern branch point to widespread disease. Fruiting bodies were found emerging from several old wounds.

The foliage and twig growth, as well as numerous growth cracks in the upper scaffold branches indicates that the tree grew vigorously this year in response to the abundant rainfall (over 60 inches). Inspection of previous year twig growth through binoculars indicate that the tree has been consistently growing shoots averaging two inches for at least the past three years, as compared to 3-4 inches this growing season. Foliage appeared normal when it sprouted in the spring, but has become infected with brown spots as the season progressed, with significant leaf drop and wilting evident.

Figure 4. Photographs of exudations and leaf condition



Results of Soil Boring: Borehole # 1 was drilled on the perimeter of the dripline on the south side of the tree on 17 February 2005 to a depth of 16.5 feet using an all terrain CME 750 drill rig using an eight inch hollow stem auger. Figure 1 shows the location of the borehole in relation to the cottonwood tree. The objective of the drilling was to characterize the soils in the fill material and test them for any hazardous materials. Drive-samples were collected at 2-5 foot intervals, labeled, stored and transported to Calscience Environmental Laboratory, Garden Grove, CA for analysis. Samples from Borehole one did not contain any elements that qualified as hazardous waste.

No roots were encountered in Borehole #1. The fill material consisted of sand, and silty sand. The creek bottom and groundwater were encountered at 12.5 feet.

While this testing was primarily done to satisfy soil characterization questions, it did provide relevant information concerning the type and quality of the fill material adjacent to the tree, which could have impacts on the root zone.

Tree #3. CA Walnut (*Juglans californica*)

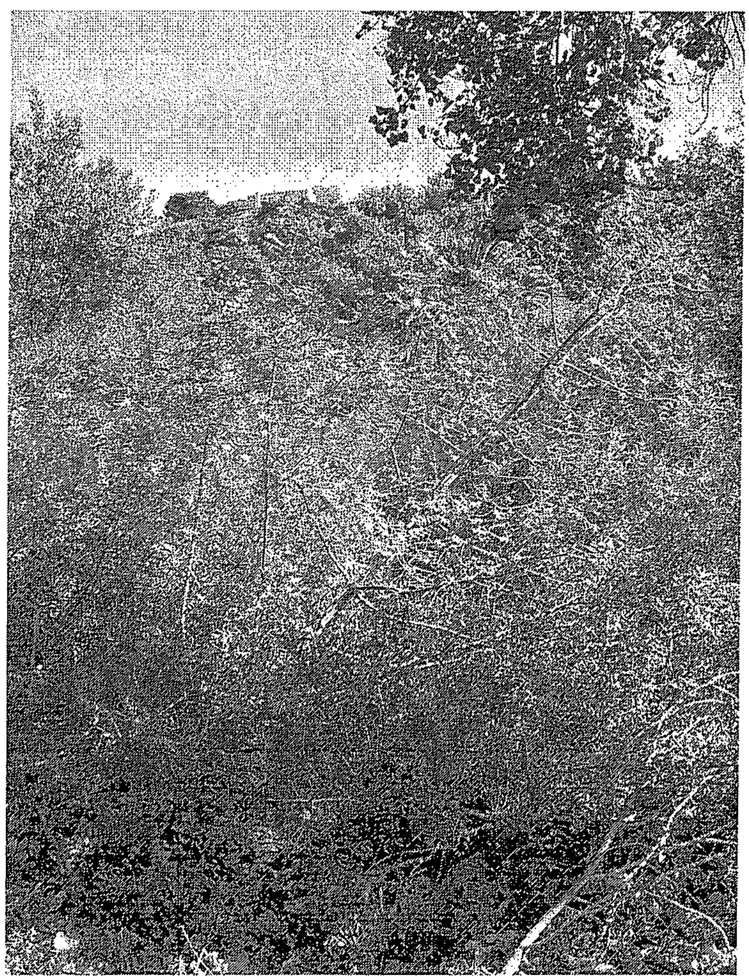


Figure 5. Tree # 3. CA Walnut (*Juglans californica*)

Site condition: Located at the top of the east fill bank, within the grouted riprap.

Understory vegetation: Blackberry, willow, mulefat, arundo

Subject Tree Observations: CA walnuts are less common riparian trees in the Topanga Creek watershed. Walnut woodlands are recognized as threatened on a statewide level.
Diameter at Standard Height (4.5 feet above grade): 8 inches
Height: 20 feet
Canopy spread: 15 feet
Condition rating: Fair- 68%
Pests and diseases: some loss of upper canopy leaves to insect herbivory. Trunk bark cracked.

Reason for Removal: Given the location at the upper edge of the fill material, it will not be possible for the tree to remain once the fill material is removed. Although the tree is in fair condition, moving the tree is not recommended, as this is costly, would require significant investment in long term maintenance, and has a high incidence of failure.

Trees to be Retained;

Due to their location on the lower edges of the berm, it appears possible to retain several mature sycamore trees. Careful excavation of the surrounding soil, supervised by a qualified arborist is recommended in order to determine distribution of roots, and extent of the root ball that can be retained to provide structural stability. Since failure of the trees is a possibility once the soil environment is changed, mitigation for these trees is recommended.

Tree # 4. Sycamore Tree (*Platenus racemosa*)

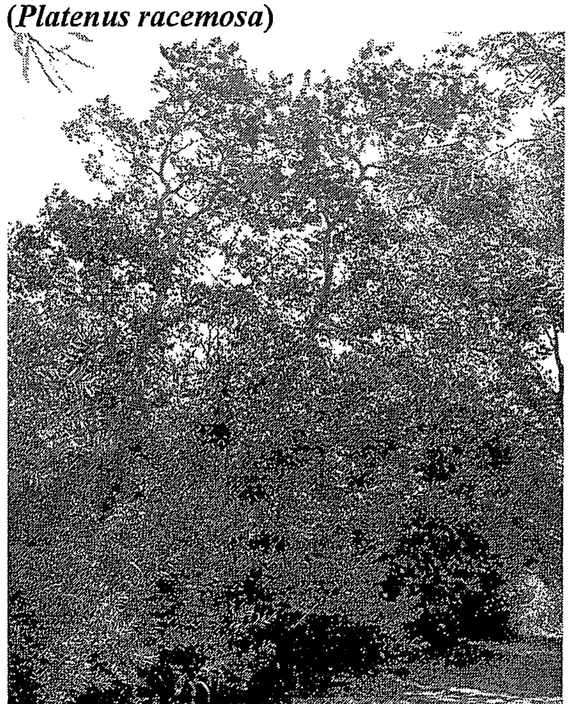


Figure 6. Tree # 4. Sycamore Tree (*Platenus racemosa*)

Site condition: Located on the upper edge of the east side of the berm above grouted riprap.

Understory vegetation: Blackberry, willows, walnut, arundo, mulefat

Subject Tree Observations: This multi-trunk tree is located where it may be possible to create a small island of remaining fill to support the tree.
Diameter at Standard Height (4.5 feet above grade): 35.6 inches (18.9 and 16.7)
Height: 50 feet
Canopy spread: 50 feet
Condition Rating: Good – 72%
Pests and diseases: Anthracnose present.

Tree #5. Sycamore Tree (*Platenus racemosa*)

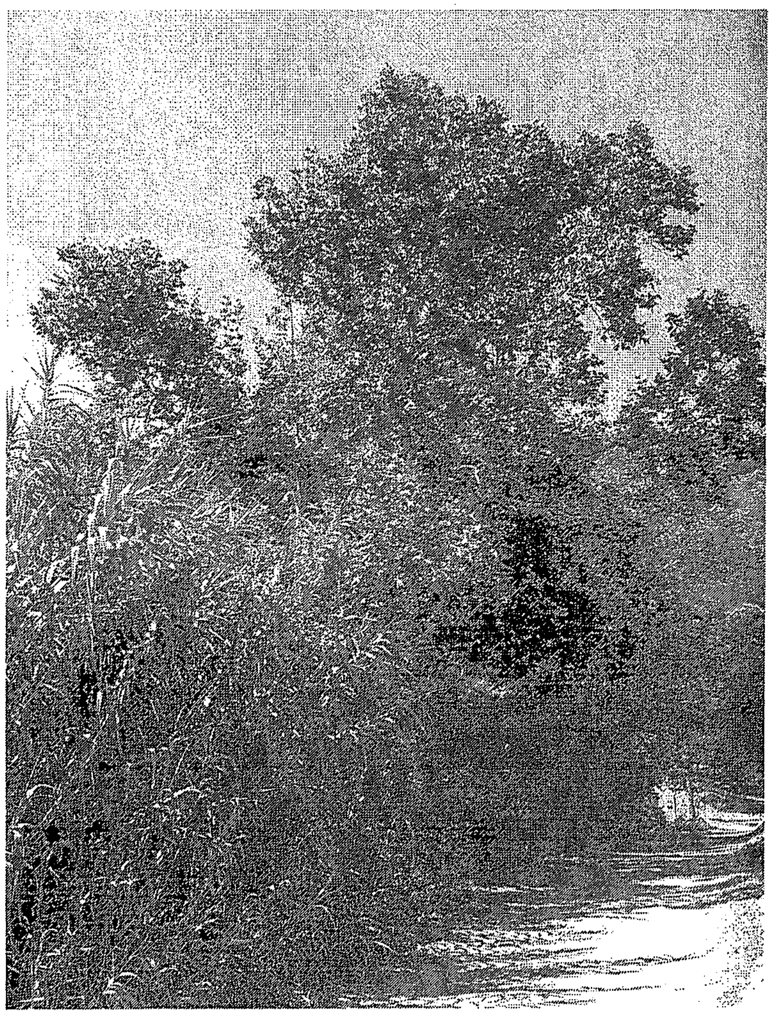


Figure 7. Tree #5 Sycamore Tree (*Platenus racemosa*)
Looking northwest

Site condition: Located along the side of the west bank, below obvious riprap.

Understory vegetation: Arundo and mixed grasses

Subject Tree Observations: This tree has quite unusual branching, and due to its location on the side of the berm, it should be possible to create an island of fill material sufficient to sustain it once the berm is removed.
Diameter at Standard Height (4.5 feet above grade): 27.8 inches
Height: 70 feet
Canopy spread: 50 feet
Condition Rating: Fair – 68%
Pests and diseases: Anthracnose

Tree #6. Sycamore Tree (*Platenus racemosa*)

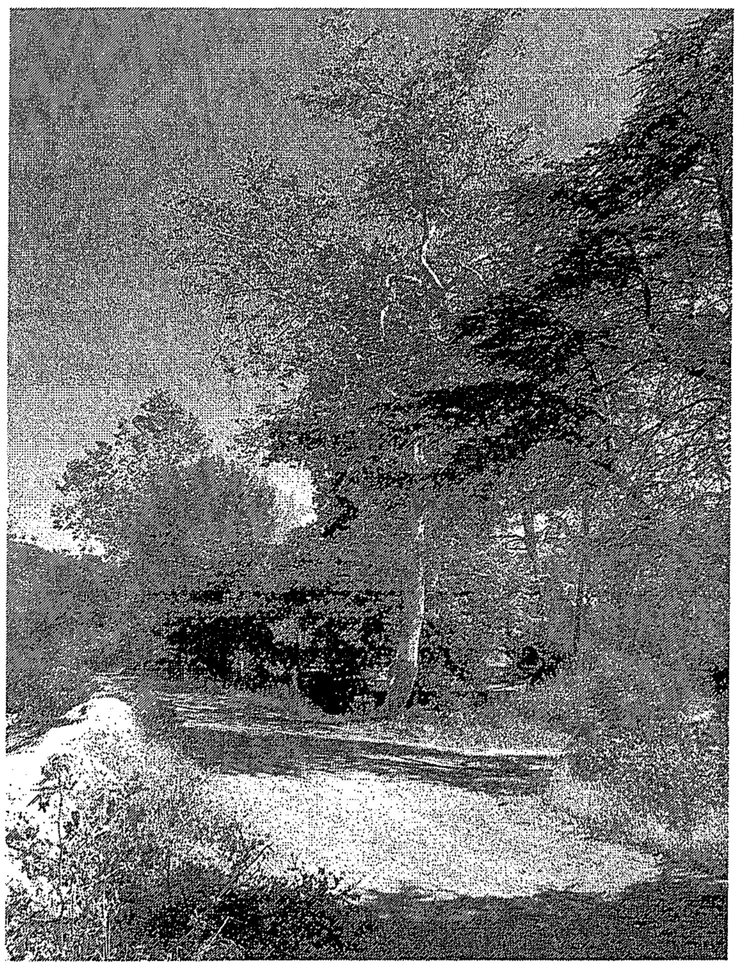


Figure 8. Tree #5. Sycamore Tree (*Platenus racemosa*)

Site condition: Located on the corner of the berm and an unpaved road. A two foot high gunnite wall separates the edge of the roadway and the trunk.

Understory vegetation: Mixed grasses, CA Bay tree is adjacent

Subject Tree Observations: It should be possible to remove the fill material on the east side of this tree without compromising the stability or much of the root zone.
Diameter at Standard Height (4.5 feet above grade): 37.8 inches (10.2 and 27.6)
Height: 70 feet
Canopy spread: 40 feet
Condition Rating: Fair – 53%
Pests and diseases: Anthracnose

Tree # 7. Sycamore Tree (*Platenus racemosa*)

Figure 9. Tree #7. Sycamore Tree (*Platenus racemosa*)

Site condition: Located behind the southwest corner of the berm and an unpaved road.

Understory vegetation: Dominanted by *Arundo donax* which obscured the root collar. Nasturtium and cape honeysuckle covered much of the trunk and canopy.

Subject Tree Observations: It should be possible to remove the fill material on the east side of this tree without compromising the stability or much of the root zone.
Diameter at Standard Height (4.5 feet above grade): 19.5 inches
Height: 35 feet
Canopy spread: 25 feet

Condition Rating: Good - 72%
Pests and diseases: Anthracnose

Tree # 8. Sycamore Tree (*Platenus racemosa*)

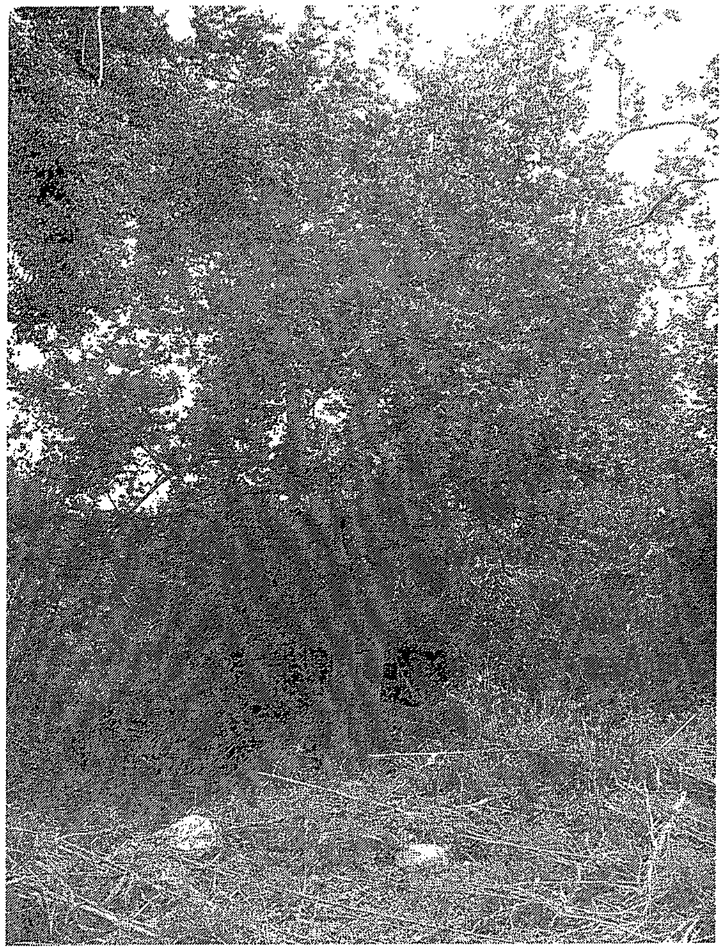


Figure 10. Tree #8. Sycamore Tree (*Platenus racemosa*)

Site condition: Located on a small rise southeast of the berm near an unpaved road.

Understory vegetation: *Arundo donax*, nasturtiums, castor bean and *Euphorbia terracina*.

Subject Tree Observations: This tree is far enough away from the work zone that it should not have any substantial impacts.
Diameter at Standard Height (4.5 feet above grade): 47.7 inches (22.2 and 25.5)
Height: 60 feet
Canopy spread: 40 feet
Condition Rating: Fair – 56%
Pests and diseases: Anthracnose, boring beetles in trunk up to 6 feet

Tree # 9. Sycamore Tree (*Platenus racemosa*)

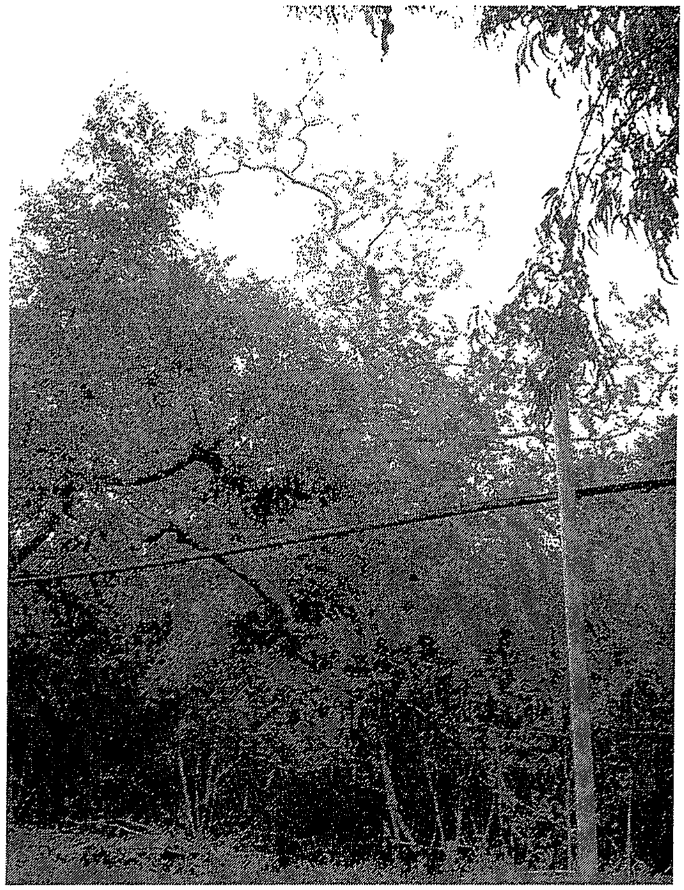


Figure 11. Tree #9. Sycamore Tree (*Platenus racemosa*)

Site condition: Located on the southwest corner of the berm.

Understory vegetation: *Arundo donax*, cape honeysuckle, other sycamores.

Subject Tree Observations: It should be possible to remove the fill material on the east side of this tree without compromising the stability or much of the root zone.

Diameter at Standard Height (4.5 feet above grade): 33 inches (13 and 20)
Height: 35 feet
Canopy spread: 40 feet
Condition Rating: Fair – 64%
Pests and diseases: Anthracnose

DISCUSSION

Removal of the coast live oak (#1), cottonwood (#2) and CA walnut trees (#3), along with the willows, toyon and elderberry is regrettable, but due to their location within the berm, it does not appear possible to retain them once the fill material is removed and their stability is compromised.

Based on the limited site observations possible at this time, it is difficult to evaluate the stability of the cottonwood trunk, which has been buried to some extent for over 35 years. Typically, roots and trunks that experience such severe grade changes and survive do so by generating additional roots from the trunk at a level sufficient to obtain necessary water and nutrients.

Cottonwood trees are adapted to the variable levels and dynamic processes of creek channels, and it appears that this tree has been able to develop sufficient root system to remain upright and to sustain a reasonably healthy canopy. However, once a tree has generated such an adventitious root system, it can be extremely harmful to remove it. Not only does the tree suffer from loss of absorbing root mass, which can directly reduce health and vigor, but the structural integrity of the buried trunk may be so compromised that removal of the fill causes the tree to fall over (Harris, 1992).

The ability to retain the sycamore trees will depend on the skill of the equipment operators and the distribution of the roots that become apparent upon excavation. Since the berm is heavily compacted and the trees appear to have grown on the berm following its installation, it may be possible to isolate the structural roots and leave an island of fill material surrounding them, allowing the trees to remain. Tree # 4 will be the most difficult to retain, due to its location on the top of the berm material. Trees #5 and 6 should be less subject to root loss and disturbance since they are located closer to the edges. Trees #7, 8 and 9 are also located far enough away from the proposed excavation zone that they should be subject to limited disturbance.

CONCLUSION

Excavation of the berm, while beneficial to restoring the creek channel and floodplain, will result in the removal of the native trees growing within it. This will include the loss of:

- Approximately 30 willows (*Salix sp.)* of varying sizes
- Two toyon (*Heteromeles arbutifolia*)
- One elderberry (*Sambucus mexicanus*)
- One coast live oak (*Quercus agrifolia*) Tree #1
- One heritage cottonwood (*Populus fremontii*) Tree #2
- One CA walnut (*Juglans californica*) Tree #3

The mature sycamore trees (Trees #4-9) should be retained if at all possible.

RECOMMENDATIONS

Since the objective is to preserve native trees if at all possible, the following recommendations are offered to provide guidelines on how to proceed with the berm removal in the most sensitive way possible.

Trees to be removed:

Mitigation for the loss of these mature native trees will be required by the California Coastal Commission and the California Department of Fish and Game Streambed Alteration permit. The CDFG standard ratio is 3:1, while that of the Coastal Commission is a minimum of 10:1. Given the sensitivity of the area, a higher ratio of mitigation plantings is recommended. These mitigation trees should be incorporated into the Revegetation Plan for the Berm Removal and planted at that time. This more extensive mitigation will save time and money over the long run, as well as provide important canopy cover to the restored creek channel and floodplain.

Mitigation Plan for Trees removed:

1. Tree #1 COAST LIVE OAK
   The loss of this tree should be mitigated with planting a minimum of five one gallon oaks grown from locally collected acorns, and an additional 10 acorns in tree tubes.

2. Tree #2 COTTONWOOD
   The loss of this heritage size tree is significant, both due to its size and the fact that the species is uncommon in the Topanga Creek Watershed. Mitigation should include planting a minimum of 15 cuttings propagated from the tree prior to its removal.

3. Tree #3 CA WALNUT
   Although this is a relatively small tree, the loss of CA Walnuts throughout their range suggests that a minimum replacement planting of three one gallon trees, as well as 10 nuts in tree tubes. Nuts should be gathered from within the watershed.

4. A minimum of 100 willow stakes cut from trees on site should be incorporated into the Revegetation Plan.

5. A minimum of 10 toyon and elderberries should be planted, from seed material or cuttings harvested from within the watershed.

Trees to be retained:
In order to maximize the potential for retaining the mature sycamores (Trees # 4-9), the following recommendations are suggested:

Excavation Technique

1. An arborist should be on site at all times to provide continuous guidance to the excavation crew.
2. The area within the dripline plus an additional radius of 15 feet should be delineated as the Root Protection Zone. All excavation within this zone should be done under the direct supervision of a qualified arborist.
3. Material should first be removed with hand tools within a six foot radius of the trunk to locate structural roots. Based on distribution of roots and trunk condition uncovered, the arborist can advise the crew if use of a bobcat or other excavation machine is possible without compromising the tree. If not, then excavation should be confined to hand tools.
4. If there is a question of tree stability once the fill material is removed, the arborist shall work with the CDPR ecologist to determine if the tree should be removed or retained and either allowed to fail under natural conditions or supported by bracing or cabling.

Maintenance and Monitoring Plan

1. A minimum of five years of maintenance should be required, which includes quarterly visits from the arborist and their crew to monitor the structural integrity and overall condition of the trees.
2. A minimum of five years of monitoring should also be required, including but not limited to, quarterly photographic documentation, and documentation of structural and health condition.

Mitigation Plan

1. Should any of the sycamore trees fail, a pro-active mitigation planting should be incorporated into the Revegetation Plan for the site. A minimum of 15 one gallon sycamore trees should be planted. Use of locally derived plant materials is recommended.

GLOSSARY

Adventitious roots – Roots emerging from areas of the trunk buried in fill.

Hazard Tree – A tree that due to its condition has a high potential for failure.

Target – An object, structure or pedestrian area that could be impacted if a tree fell.

REFERENCES

Harris, Richard W. 1992. Arboriculture: Integrated Management of Landscape Trees, Shrubs and Vines. Second Edition. Prentice Hall, Englewood Cliffs, NJ.

APPENDIX A

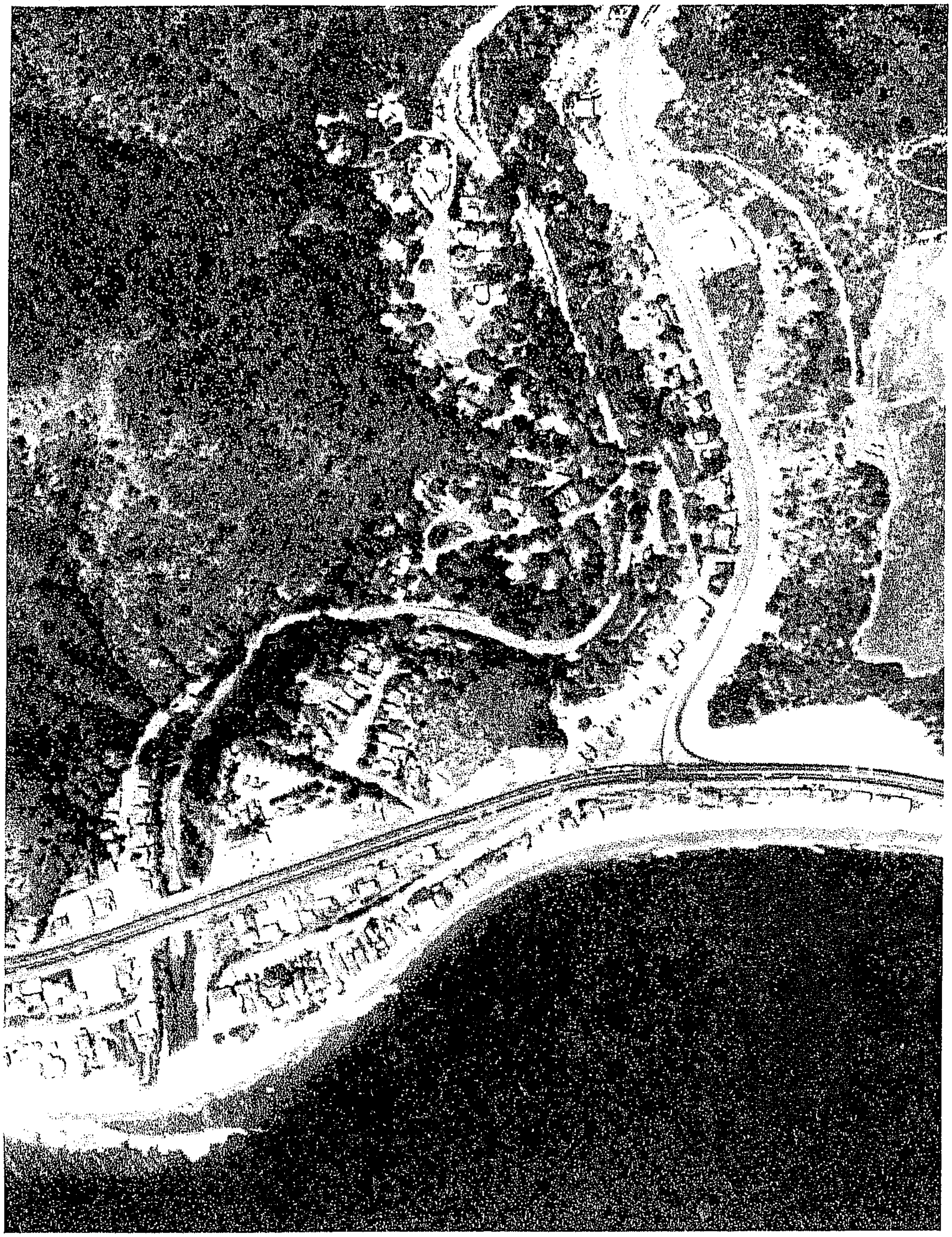
HISTORIC AERIAL PHOTOGRAPHS
RODEO GROUNDS BERM AREA

1928 Fairchild Collection
1940 Fairchild Collection
1956 Fairchild Collection
1997 Resource Conservation District of the Santa Monica Mts. Collection

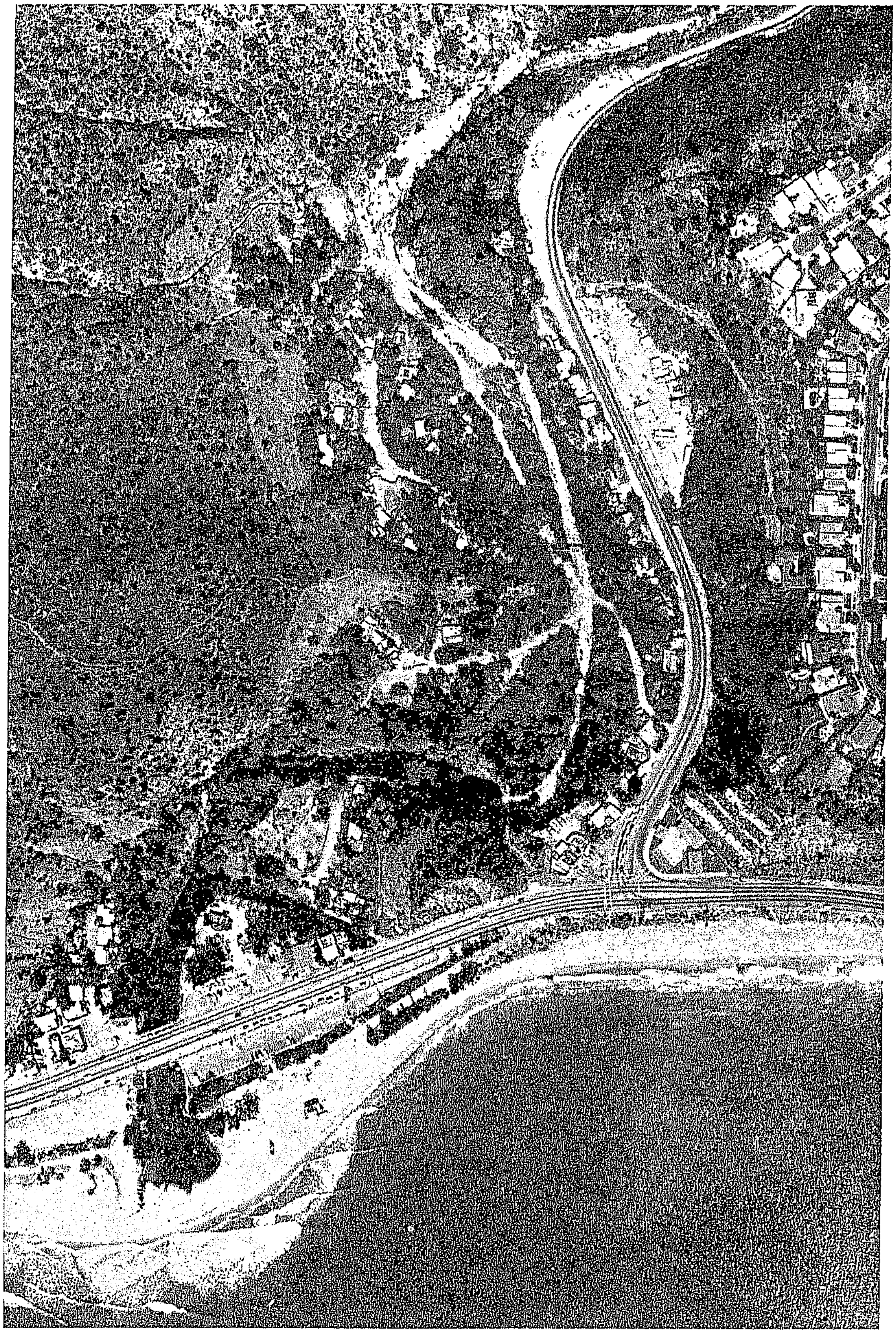
1928 Fairchild Collection

1940 Fairchild Collection

1956 Fairchild Collection



1997 RCDSMM Collection



APPENDIX B

RODEO GROUNDS BERM

FIELD NOTES

ADDITIONAL PHOTOS

SOIL BOREHOLE LOCATION MAP

RODEO GROUNDS BERM TREE SUMMARY			
Sep-05			
Submitted by Rosi Dagit, Certified Arborist #1054			
Tree Number	**1**	**2**	**3**
Tree Species	*Q. agrifolia*	*P. fremontii*	*J. californica*
Number of Trunks	1	2	1
DSH (4.5 feet above grade)	12.2	82.5	8
Heritage Tree?	NO	YES	NO
Height (feet)	30	85	20
Condition Rating	Good -72%	Poor - 44%	Fair - 68%
Leaning Direction	SE	N	SE
Root Crown condition	in W bank	buried	in E bank
Canopy condition (% shade)	90%	60%	50%
Dripline measurements:			
(dist. from trunk/ ht. branch)			
North	7'/10'	36'/20'	5'/10'
East	15'/8'	30'/18'	5'/3'
South	15'/10'	27'/18'	15'/3'
West	15'/20'	30'/20'	10/3'
Recommended Action	**REMOVE**	**REMOVE**	**REMOVE**
NOTES	due to	Trunk fully	growing into
	location,	buried in	concrete
	it will be	fill, rotted	
	impossible	at present	
	to save	soil line	

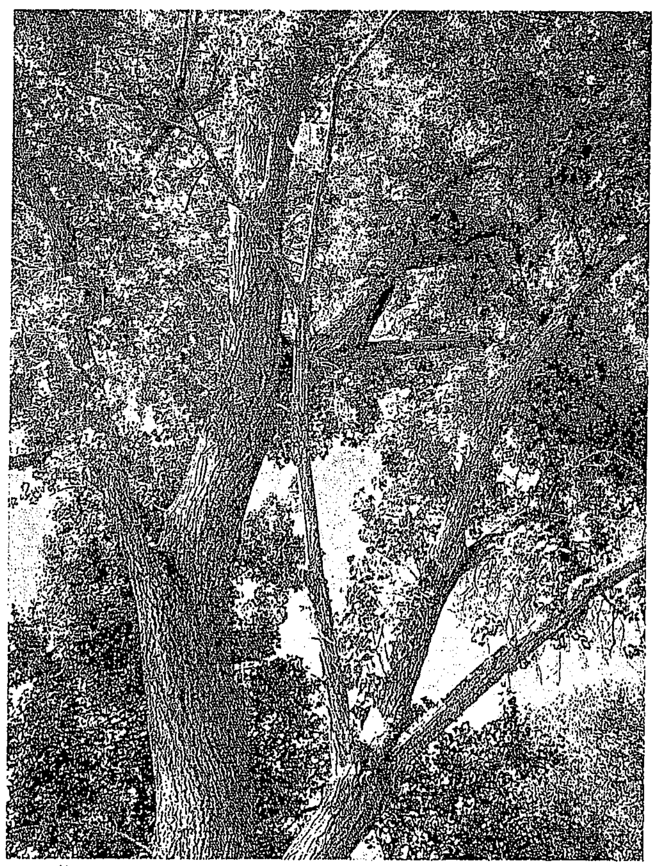
Tree Number	4	5	6
Tree Species	*P. racemosa*	*P. racemosa*	*P. racemosa*
Number of Trunks	2	1	2
DSH (4.5 feet above grade)	35.6	27.8	37.8
Heritage Tree?	YES	NO	YES
Height (feet)	60	70	70
Condition Rating	Good- 72%	Fair -64%	Fair- 52%
Leaning Direction	NE	N	N
Root Crown condition	in E bank	in W bank	in W bank
Canopy condition (% shade)	60%	80%	80%
Dripline measurements:			
(dist. from trunk/ ht. branch)			
North	25'/10'	40'/35'	40'/25'
East	20'/25'	30'/12'	10'/20'
South	25'/35'	30'/15'	15'/4'
West	30'/20'	40'/20'	30'/30'
Recommended Action	**RETAIN**	**RETAIN**	**RETAIN**
NOTES	might be	might be	might be
	saved by	saved by	saved by
	carefull	carefull	carefull
	excavation	excavation	excavation
	leaving an	leaving an	at corner
	island	island	
Tree Number	**7**	**8**	**9**
Tree Species	*P. racemosa*	*P. racemosa*	*P. racemosa*
Number of Trunks	1	2	2
DSH (4.5 feet above grade)	19.5	47.7	33
Heritage Tree?	NO	YES	NO
Height (feet)	35	60	35
Condition Rating	Good- 72%	Fair -56%	Fair- 64%
Leaning Direction	S	S	S
Root Crown condition	in bank	in bank	in bank
Canopy condition (% shade)	60%	75%	50%
Dripline measurements:			
(dist. from trunk/ ht. branch)			
North	15'/15'	20'/5'	20'/5'
East	10'/10'	30'/25'	20'/5'
South	25'/5'	20'/20'	15'/10'
West	15'/10'	40'/5'	25'/10'
Recommended Action	**RETAIN**	**RETAIN**	**RETAIN**
NOTES	should be	should be	should be
	saved by	saved by	saved by
	carefull	carefull	carefull
	excavation	excavation	excavation
			at corner

Guide to Judging Plant Condition			International Society of Arboriculture, 2000			
Condition Scoring system POINTS			RATING			
No problems (based on inspection) 5			Excellent 90-100 %			
No apparent problems 4			Good 70-89%			
Minor problem(s) 3			Fair 50-69%			
Major problem(s) 2			Poor 25-49%			
Extreme problem(s) 1			Very Poor 05-24%			
Inspector: Rosi Dagit						
	Tree No. and Species					
CONDITION RATING	***1. Quercus***	*72%*	***2. Populus***	*44%*	***3. Juglans***	*68%*
(Divide subtotal points by 25 (total points possible)	***agrifolia***	Good	***fremontii***	Poor	***californica***	Fair
and multiply by 100 to obtain percent rating						
CONDITION FACTORS	**NOTES**	**SCORE**	**NOTES**	**SCORE**	**NOTES**	**SCORE**
FACTOR 1. ROOTS		4	buried under fill	*1*	on E fill bank	*3*
Root anchorage	on W. fill bank					
Confined relative to top			boring to S found no roots		roots confined	
Collar soundness			approx. 80% decayed		in concrete	
Mechanical injury						
Girdling or kinked roots						
Compaction or water-logged roots			heavy fill compacted			
Toxic gas and chemical symptoms						
Presence of insects or diseases						
FACTOR 2. TRUNK		4	buried under fill	*2*		*3*
Sound bark and wood, no cavities	good growth					
Upright trunk (well tapered)	cracks				leans strongly	
Mechanical or fire injury			wounded by vehicles			
Cracks - frost, fire, etc.					many cracks	
Swollen or sunken areas			sunken in several areas			
Presence of insects or diseases						
FACTOR 3. SCAFFOLD BRANCHES	ok	4		*2*	ok	*4*
Strong attachments						
Smaller diameter than trunk						
Vertical branch distribution					small branches	
Free of included bark			some at major limbs			
Free of decay and cavities			main stubs rotted			
Well-pruned, no severe heading back			stub cuts			
Well-proportioned,-tapered, laterals along branches						
Wound closure			mixed, some ok			
Amount of dead wood or fire injury (% of canopy)	5 % deadwood		15% dead, many broken		15% deadwood	
Presence of decay, insects or diseases			branches			
FACTOR 4. SMALL BRANCHES AND TWIGS		3		*3*	ok	*4*
Vigor of current shoots, compared to past 3-5 years	2-6 inch shoots		ok for last 2 years w/ rain			
Well-distributed through the canopy						
Normal bud appearance - color, shape, size for sp.						
Presence of weak or dead twigs			10-20 %			
Presence of insects or diseases						
FACTOR 5. FOLIAGE		3		*3*		*3*
Normal appearance - size and color for sp.	small overall		ok			
Nutrient deficiencies						
Herbicide, chemical or pollutant injury symptoms						
Wilted or dead leaves			over 50% by mid summer			
Presence of insects or diseases	whitefly, leaf miner		leaf scortch, brown spots		leaves eaten	
Total subtotal points assessing all Five Factors		*18*		*11*		*17*

Guide to Judging Plant Condition			International Society of Arboriculture, 2000			
Condition Scoring system POINTS			RATING			
No problems (based on inspection) 5			Excellent 90-100 %			
No apparent problems 4			Good 70-89%			
Minor problem(s) 3			Fair 50-69%			
Major problem(s) 2			Poor 25-49%			
Extreme problem(s) 1			Very Poor 05-24%			
Inspector: Rosi Dagit						
CONDITION RATING	*4. Platenus*	*72%*	*5. Platenus*	*64%*	*6. Platenus*	*52%*
(Divide subtotal points by 25 (total points possible)	*racemosa*	Good	*racemosa*	Fair	*racemosa*	Fair
and multiply by 100 to obtain percent rating						
CONDITION FACTORS	NOTES	SCORE	NOTES	SCORE	NOTES	SCORE
FACTOR 1. ROOTS		4				
Root anchorage	on E fill bank		on w fill bank	4	on w fill bank	3
Confined relative to top			extends out		in corner	
Collar soundness					behind small	
Mechanical injury					concrete wall	
Girdling or kinked roots						
Compaction or water-logged roots						
Toxic gas and chemical symptoms						
Presence of insects or diseases						
FACTOR 2. TRUNK		4		3		3
Sound bark and wood, no cavities					axe wounds	
Upright trunk (well tapered)			leader broken off			
Mechanical or fire injury						
Cracks - frost, fire, etc.						
Swollen or sunken areas						
Presence of insects or diseases						
FACTOR 3. SCAFFOLD BRANCHES		4		3		3
Strong attachments			weak attachments		weak attachments	
Smaller diameter than trunk			odd angles			
Vertical branch distribution						
Free of included bark						
Free of decay and cavities						
Well-pruned, no severe heading back						
Well-proportioned,-tapered, laterals along branches			broken branches		broken branches	
Wound closure			tears present		tears present	
Amount of dead wood or fire injury (% of canopy)			10% deadwood		15% deadwood	
Presence of decay, insects or diseases						
FACTOR 4. SMALL BRANCHES AND TWIGS		3		3		2
Vigor of current shoots, compared to past 3-5 years						
Well-distributed through the canopy					thin, sparse	
Normal bud appearance - color, shape, size for sp.			small leaves		small leaves	
Presence of weak or dead twigs	15% deadwood		25% deadwood		50% deadwood	
Presence of insects or diseases			chlorosis		chlorosis	
FACTOR 5. FOLIAGE		3		3		2
Normal appearance - size and color for sp.					wilted	
Nutrient deficiencies			chlorotic		chlorotic	
Herbicide, chemical or pollutant injury symptoms						
Wilted or dead leaves			50 % wilted		80% wilted	
Presence of insects or diseases	anthracnose		anthracnose		anthracnose	
Total subtotal points assessing all Five Factors		*18*		*16*		*13*

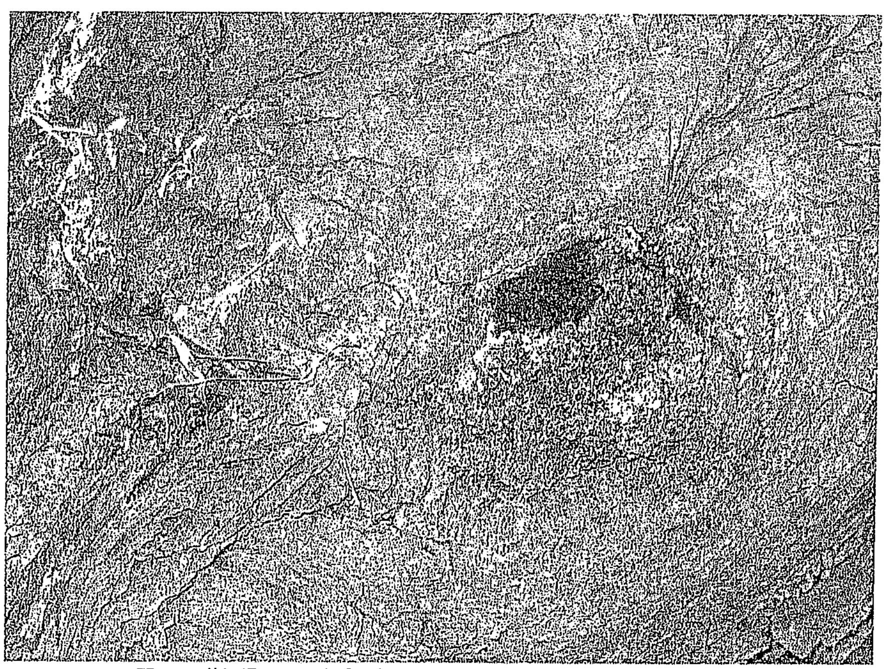
Guide to Judging Plant Condition			International Society of Arboriculture, 2000			
Condition Scoring system POINTS			RATING			
No problems (based on inspection) 5			Excellent 90-100 %			
No apparent problems 4			Good 70-89%			
Minor problem(s) 3			Fair 50-69%			
Major problem(s) 2			Poor 25-49%			
Extreme problem(s) 1			Very Poor 05-24%			
Inspector: Rosi Dagit						
CONDITION RATING						
(Divide subtotal points by 25 (total points possible)	***7. Platenus***	*72%*	***8. Platenus***	*56%*	***9. Platenus***	*64%*
and multiply by 100 to obtain percent rating	***racemosa***	Good	***racemosa***	Fair	***racemosa***	Fair
CONDITION FACTORS						
FACTOR 1. ROOTS	**NOTES**	**SCORE**	**NOTES**	**SCORE**	**NOTES**	**SCORE**
Root anchorage		3				
Confined relative to top	buried by arundo		buried in fill	3	on bank	4
Collar soundness					above trench	
Mechanical injury						
Girdling or kinked roots						
Compaction or water-logged roots						
Toxic gas and chemical symptoms						
Presence of insects or diseases			borers and exudate			
FACTOR 2. TRUNK						
Sound bark and wood, no cavities		4		3		3
Upright trunk (well tapered)	leans to South					
Mechanical or fire injury						
Cracks - frost, fire, etc.			fire scars			
Swollen or sunken areas					swellings	
Presence of insects or diseases			boring beetles up 6'			
FACTOR 3. SCAFFOLD BRANCHES						
Strong attachments		4	sharp angles	2		3
Smaller diameter than trunk					sharp angles	
Vertical branch distribution						
Free of included bark						
Free of decay and cavities			main branches dead			
Well-pruned, no severe heading back						
Well-proportioned,-tapered, laterals along branches			some woundwood			
Wound closure						
Amount of dead wood or fire injury (% of canopy)						
Presence of decay, insects or diseases			35% deadwood		20% deadwood	
FACTOR 4. SMALL BRANCHES AND TWIGS						
Vigor of current shoots, compared to past 3-5 years		4		3		3
Well-distributed through the canopy						
Normal bud appearance - color, shape, size for sp.						
Presence of weak or dead twigs						
Presence of insects or diseases	15% deadwood				20% deadwood	
FACTOR 5. FOLIAGE						
Normal appearance - size and color for sp.		3		3		3
Nutrient deficiencies						
Herbicide, chemical or pollutant injury symptoms			chlorotic			
Wilted or dead leaves						
Presence of insects or diseases			10-15 % wilted			
	anthracnose		anthracnose		anthracnose	
Total subtotal points assessing all Five Factors		*18*		*14*		*16*

Tree #2 Broken branch in upper canopy



Tree #2 Exudate and dead branches in upper canopy

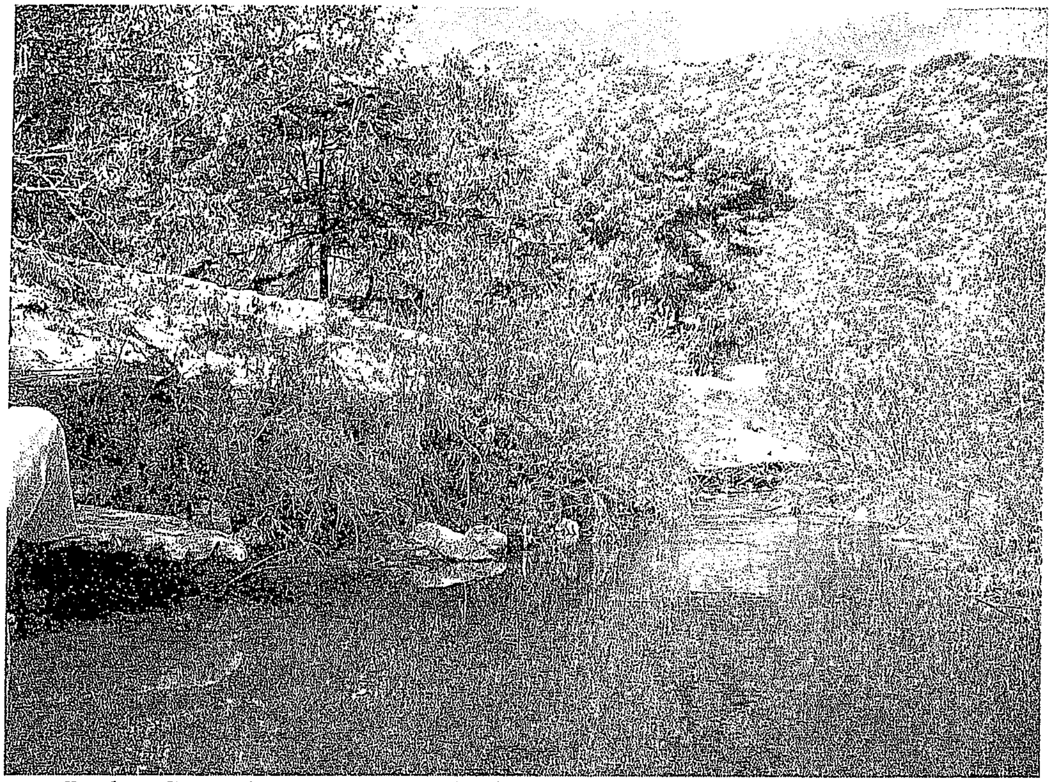
Tree #2 Decay in crotch near ground



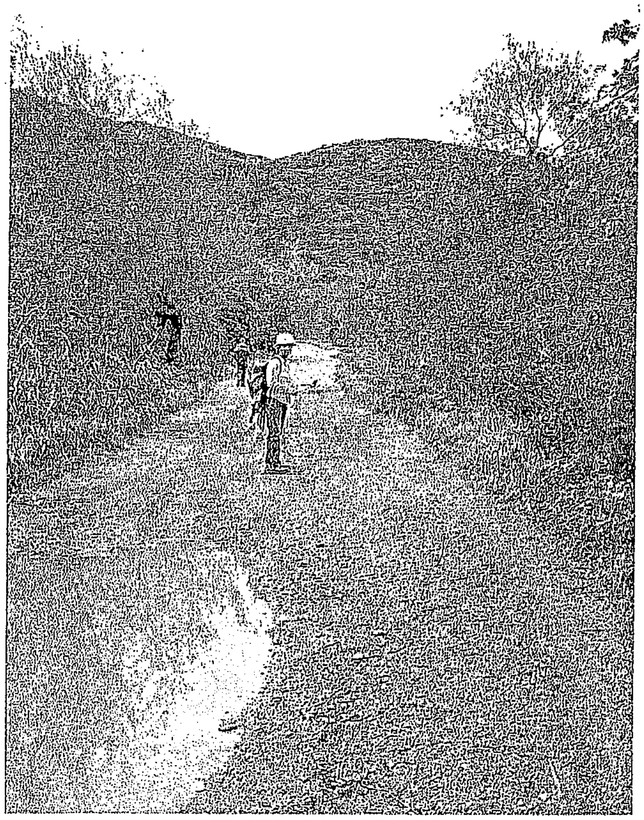
Tree #2 Fungal fruiting body in old branch scar


Tree #5 Unusual branch attachments on Sycamore

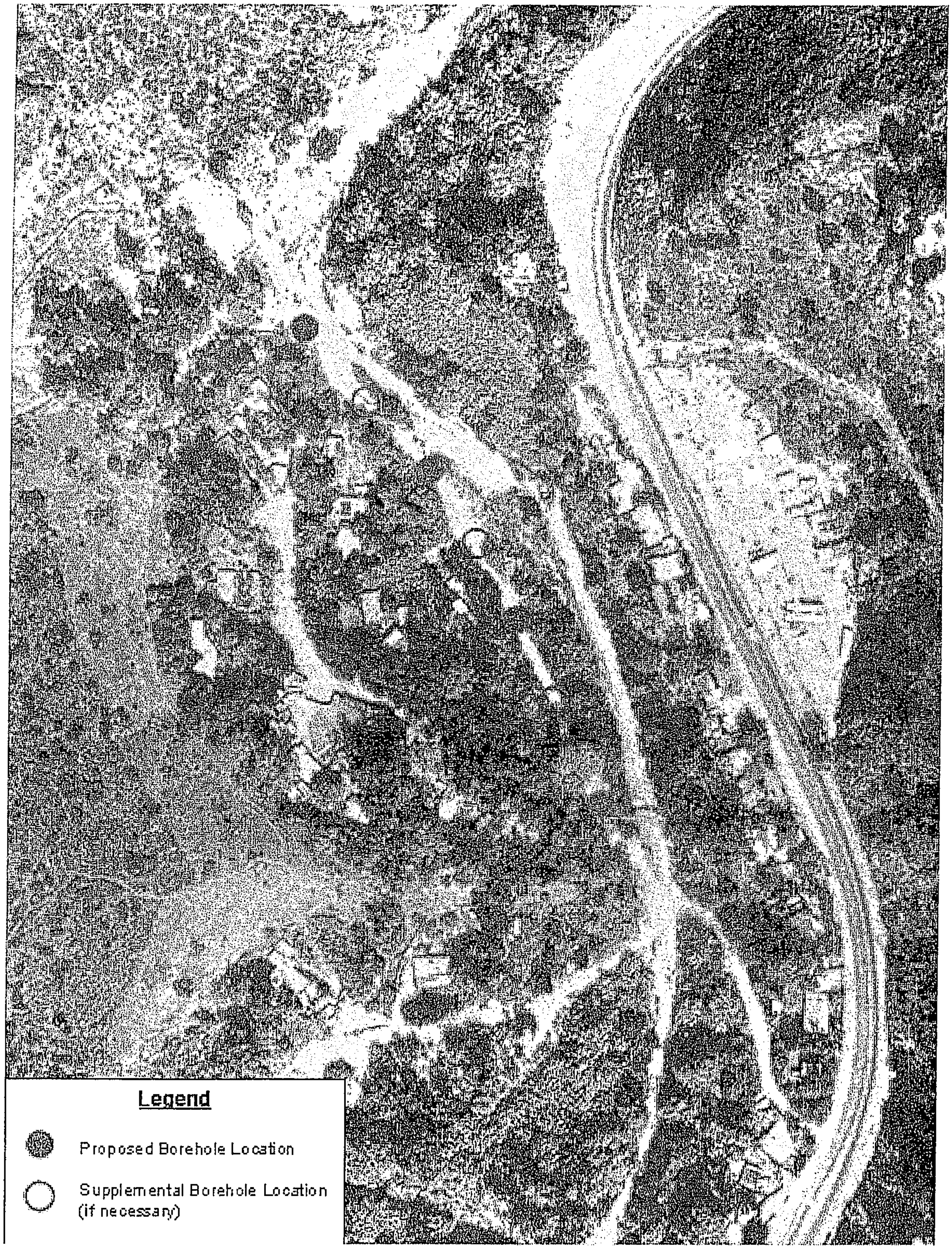

Tree #6 Sycamore to remain, illustrating root zone



Rodeo Grounds Berm as seen looking upstream from the creek channel



Top of berm showing willow thickets



Locations of soil bore holes drilled in February 2005

RODEO GROUNDS ROAD RESTORATION AND REVEGETATION PLAN

Prepared by:
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Nat Cox
CA Department of Parks and Recreation
Angeles District
1925 Las Virgenes Road
Calabasas, CA 91302

August 2006

INTRODUCTION

The primary objective of the Rodeo Grounds Berm Removal Revegetation and Restoration Project is to restore the area currently covered by the 1.8 acre berm, (which is part of the 2.27 acre area disturbed by this project), and to integrate required tree mitigation plantings into the restoration area. Additionally, hydroseeding a portion of the presently disturbed area behind the berm will jump-start the natural restoration process. It is anticipated that restoration of the floodplain and riparian corridor in the Rodeo Grounds Road area of Topanga State Park will include natural re-alignment of the creek channel in response to storm events, re-adjustment of the channel bed as accumulated sediments are naturally entrained, and natural recruitment of riparian species.

The Rodeo Grounds Road Berm was installed without plans or permits in 1969 and rebuilt in 1980 by tenants of floodplain structures to protect their rental homes from flooding. It is located approximately 2,500 feet upstream from the ocean on Topanga Creek, and covers approximately 1.8 acres. It was built in at least 2 stages, re-aligning and replacing a lower, smaller dirt road that had been installed in the 1920's. According to local residents, asphalt and paving from the Lincoln Blvd. re-paving project were placed on the site in the late 1960's. Additional road spoils from throughout the watershed were added to raise the berm higher following the 1980 flood. Since the property was incorporated into Topanga State Park in 2001, the structures are being removed. It is anticipated that all the structures currently protected by the berm will be removed prior to the start of this project.

In order to restore the floodplain and channel of Topanga Creek to its original configuration, the berm needs to be removed. Removal will restore the natural creek channel, restore over 12 acres of wetland/ riparian floodplain, and restore above surface creek flow to provide summer rearing habitat, as well as improve over-winter habitat and critical passage links for endangered southern steelhead trout between the main stem of Topanga Creek and the ocean.

Additionally, it is anticipated that removal of the berm will allow natural storm flushing of accumulated sediments from upstream of the project area, restoring over 1,000 linear meters of creek connectivity that is critical for migrating adult and juvenile steelhead trout. The removal of these sediments should also result in a more natural diversity of geomorphologic habitat units, which should provide additional spawning and rearing habitat for fishes.

A critical component of the restoration is removal of the existing exotic and invasive species associated with the removal of the berm and structures, and re-establishment of native aquatic, coastal sage scrub and riparian woodland communities. It is anticipated that the creek channel will meander and eventually return to its more historic location and patterns.

Since the removal of the berm will require the loss of several mature native trees that have become established on the berm since 1980, as well as the probable loss of a mature cottonwood tree that was buried within the berm, planting of mitigation trees will be needed to meet California Coastal Commission and California Department of Fish and Game permit requirements. This plan incorporates those mitigation plantings within the larger matrix of overall restoration.

Preliminary archeological surveys indicate that no cultural resources will be impacted by the removal of the berm down to the native creek bed level, or slight grading of the former house locations to eliminate mounding and promote creek channel restoration.

PROJECT GOALS AND ACTION STATEMENTS

Goal: Restore native vegetation that will restore the aquatic, coastal sage scrub, and riparian woodland communities of the site, and provide high quality habitat for endangered steelhead trout following the removal of the berm.

Actions:

Eliminate exotic species:

- Remove all non-native tree species from the berm, and,
- Remove invasive species such as *Arundo donax*, fennel, black mustard, tree tobacco and cape ivy.

Promote establishment of native plant communities:

- Restore riparian woodland and coastal sage scrub species along the slopes,
- Restore aquatic and obligate wetland species within the floodplain and along the channel, and,
- Install all required mitigation plantings.

Goal: Restore the natural creek geo-morphology and hydrologic and hydraulic regimes.

Actions:

Restore natural creek grade and soil health:

- Remove the fill material and gunnite that comprise the berm,
- Evaluate soils for compaction and treat appropriately.
- Preserve soils that appear intact or contain mycorrhizae or other biotic elements that will facilitate the soil development of newly restored regions, and,
- Preserve the small areas delineated as wetlands on the perimeter of the creek channel.

Restore the western slope and floodplain area:

- Restore the western slope following the removal of the berm along the contour, matching the natural hillslope on either side of the berm,
- Install jute netting or other suitable erosion control fabric to initially stabilize the slope, and,
- Rip and decompact the areas within the footprints of previous home sites to promote increased channel width, variable scour and deposition, and encourage entrainment of the sediments that have accumulated upstream.

SCHEDULE OF ACTIVITIES

This schedule may need to be altered due to funding constraints.

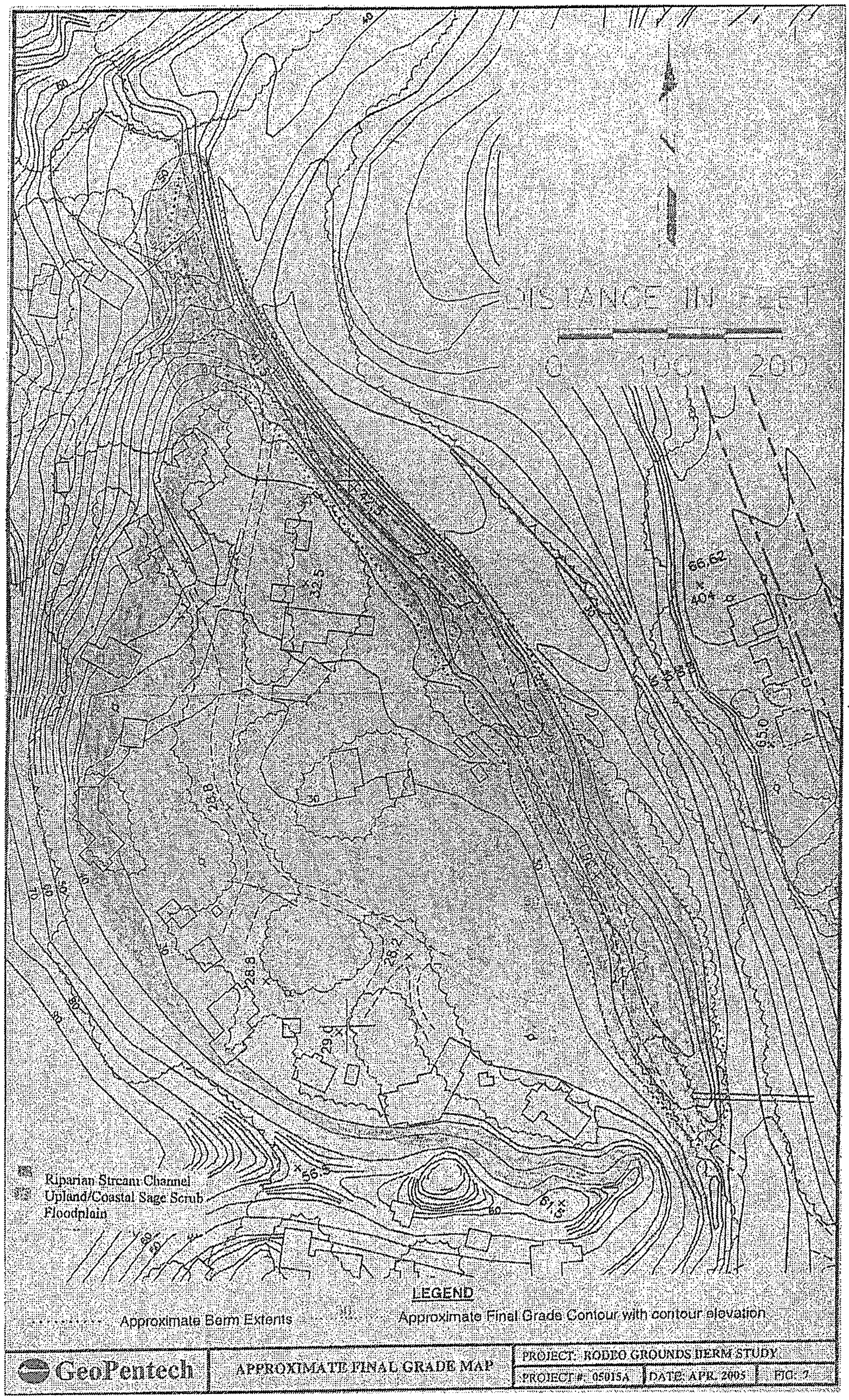
Spring -Fall 2007: Collect seed and cuttings, propagate, continue exotic species removal
Fall 2007: Prepare site, install jute netting/erosion control fabric, and initiate planting
2007-2012: Monitoring and maintenance

SITE LOCATION

This project is located approximately 2,500 feet upstream from the ocean, bounded by the present creek channel on the east, and a natural hillslope on the west and southwest. The project area includes the 1.8 acre berm which will be removed down to natural creek bed level, as well as the surrounding floodplain which has experienced disturbance from a variety of development associated with the residential land uses. The total project area encompasses approximately 12.4 acres, where all exotic ornamental vegetation will be removed during excavation and structure removal.

The revegetation and restoration effort will focus on planting trees along the toe of the slope to provide additional stabilization. Willow and mulefat cuttings and seeds will be directed to the former berm footprint. The disturbed floodplain area which will be used during the excavation process for truck access and stockpiling materials will be de-compacted and at least 6 acres hydroseeded with a seed mix appropriate to the site.

Figure 1. Rodeo Grounds Berm Project Revegetation and Restoration Project



EXISTING CONDITIONS

Preliminary vegetation mapping was undertaken by staff from the California Department of Parks and Recreation Southern Service Center in 2003 (Chris Peregrin, personal communication 2005), with additional site surveys conducted in spring 2005 by biologists from Envicom, Corp. and the Resource Conservation District of the Santa Monica Mountains.

The project area consists of a mixture of remnant wetland species, disturbed riparian assemblages dominated by southern willow scrub, and coastal sage scrub on the perimeter, with non-native exotic landscape and escaped plant species surrounding the houses. Over 100 non-native trees, ranging from large Eucalyptus to smaller fruit trees are present. Several large stands of giant reed (*Arundo donax)* are also present.

In addition to the willow complex, several mature native trees, including sycamores, coast live oak, California walnut, toyon, Mexican elderberry and a single specimen Fremont cottonwood are also present. Some of these trees have grown on top of the berm and they will need to be removed along with the fill material. Others are sufficiently isolated from the fill, and every attempt will be made to preserve them during the excavation of the fill.

SITE PREPARATION

Grading and Soil Work

The site has largely retained its floodplain gradient and as a result extensive grading will not be necessary, with the exception of berm removal.

Areas with highly compacted soils may require disking or various other treatments in order to alleviate the compaction. A bulldozer will be used to disk the soil formerly under structures or driveways to a depth of 12 inches prior to planting to loosen compacted soils, allowing for better plant and seedling establishment. Soil disking must be conducted prior to plant establishment and before winter rains set in to minimize erosion problems on site.

Exotic Plant Removal

Exotic annuals and perennials are abundant throughout the project area. A list of all species identified is found in Appendix A. Of primary concern is *Arundo donax*, a highly invasive perennial species that can quickly take over an area if left uncontrolled. A manual removal effort was initiated in 2004.

Control of all exotic species will be achieved through either mechanical methods and/or herbicide treatment as needed to achieve the target performance criteria. Specific methods used will vary according to species and those methods that minimize site disturbance will be preferred. Any herbicide use in regions that are in close proximity to the creek and its riparian habitat must be approved for aquatic and wetland habitat (i.e., Rodeo®).

Ivy (*Hedera sp.),* greater periwinkle (*Vinca major*), hottentot fig (*Carpobrotus edulis*), fennel (*Foeniculum vulgare*), Cape ivy (*Delairea odorata*), and numerous mustards and grasses including Bermuda grass (*Cynodon dactylon*) and Saint Augustine grass (*Stenotaphrum secundatum*) are difficult to remove and will require a combination of mechanical and chemical treatment and frequent monitoring for regrowth.

VEGETATION RESTORATION

The selection of plant species for this project is based on the species currently found on the site, and comparable community assemblages from adjacent areas within the Topanga Creek Watershed.

Mitigation Requirements

Both the California Coastal Commission and the California Department of Fish and Game will require mitigation for the loss of the native trees described in the Rodeo Grounds Berm Removal Project: Oak Tree Report and Native Tree Preservation and Removal Plan (August 2006). Since the goal of this project is to restore the natural floodplain and restore the riparian corridor, the mitigation plantings will be included in appropriate locations within the project area. At minimum, the mitigation planting proposed includes:

- five one-gallon coast live oaks, and 10 acorns in tree tubes
- 15 stem cuttings propagated from the cottonwood
- three one-gallon California walnuts, and 10 nuts planted in tree tubes
- 15 one-gallon sycamore trees
- 100 willow stake cuttings
- 10 one-gallon toyon
- 10 one-gallon Mexican elderberry

Additionally, a ratio of 3:1 mitigation area is typically required by the CDFG for temporary streambank impacts such as the berm removal. Therefore, this plan incorporates both of these required elements in the overall restoration plan. However, it is anticipated that natural re-alignment of the creek channel and re-adjustment of the sediment loads will occur. It therefore makes sense to concentrate the required mitigation plantings along the toe of the slope, and within the former berm footprint, with hydroseeding of the additional areas behind the berm that have been disturbed for many years due to the impacts of the tenants.

Upland/Coastal Sage Scrub slope

The project area is bordered on the north, west and southwest by natural ridges and slopes. The fill material will be removed to an appropriate landfill and the area graded to match the contour of the existing slopes. A mix of Coastal Sage Scrub species and native trees will be planted on the stabilized slope. Jute netting or a suitable erosion control fabric will be installed to mechanically hold the slope until the plantings are mature.

Recommended species include, but are not limited to:

Baccharis salicifolia

Enceilia californica
Eriogonum cinereum
Eriogonum fasciculatum foliolosum
Eriophyllum confertiflorum
Heteromeles arbutifolia
Juglans californica
Lotus scoparius
Lupinus succulentus
Malosma laurina
Nassella pulchra
Oenothera elata hirsutissima
Populus f. fremontii
Quercus agrifolia
Rhus integrifolia
Salvia mellifera
Sambucus mexicana
Umbellularia californica

Restored floodplain

The project area includes over 12 acres of historic floodplain that has been altered by years of residential land uses. The structures and some exotic ornamental vegetation around them will be removed. The soil will be prepared to address problems of compaction and to remove the invasive plants. Since it is anticipated that the creek channel will meander according to storm events until it eventually finds its preferred alignment, the revegetation palette for this area will incorporate a mix of coastal sage scrub and riparian edge species, matching the dominant southern willow scrub community.

Recommended species include, but are not limited to:

Alnus rhombifolia
Baccharis salicifolia
Eriogonum fasciculatum foliolosum
Eriophyllum confertiflorum
Heteromeles arbutifolia
Juglans californica
Lotus scoparius
Lupinus succulentus
Malosma laurina
Nassella pulchra
Oenothera elata hirsuitissima
Platanus racemosa
Populus f. fremontii
Quercus agrifolia
Rhus integrifolia
Salix exigua
Salix lasiolepis

Salix laevigata
Salvia mellifera
Sambucus mexicana
Umbellaria californica

<u>Berm Footprint</u>
The re-contoured are of the berm (1.8 acres) will be restored with a mix of southern willow scrub and more typical wetland associated species. Re-vegetation efforts along the stream channel must be designed to promote the establishment of a wider channel in which the creek may move about with variable flow events creating multiple smaller channels and benches, braiding, and various regions of scour and deposition. Re-vegetation is required throughout the entire stream channel with the expectation that these plants will establish a functional community and assist in creating variability in stream processes. Plants within the direct flow of flood events will likely be lost, and therefore the required cover criteria for those areas is not specifically defined.

Recommended species include, but are not limited to:
Alnus rhombifolia
Baccharis salicifolia
Elymus g. glaucus
Platanus racemosa
Populus f. fremontii
Salix exigua
Salix lasiolepis
Salix laevigata

Table 1. Species Palette for Revegetation of the Rodeo Grounds Berm Project

Scientific Name	Common Name	Upland/ CSS	Floodplain	Berm Footprint
TREES				
Alnus rhombifolia	White Alder		X	X
Heteromeles arbutifolia	Toyon	X	X	
Juglans californica	CA Walnut	X	X	
Platanus racemosa	CA Sycamore		X	X
Populus f. fremontii	Fremont Cottonwood	X	X	X
Quercus agrifolia	Coast Live Oak	X	X	
Salix exigua	Narrow-leaf Willow		X	X
Salix laevigata	Red Willow		X	X
Salix lasiolepis	Arroyo Willow		X	X
Sambucus mexicana	Mexican Elderberry	X	X	
Umbellularia californica	California Bay	X	X	
SHRUBS				
Baccharis salicifolia	Mule Fat	X	X	X
Eriogonum cinereum	Ashyleaf Buckwheat	X		
Eriogonum fasciculatum foliolosum	CA Buckwheat	X	X	
Malosma laurina	Laurel Sumac	X	X	
Rhus integrifolia	Lemonadeberry	X	X	
Salvia mellifera	Black Sage	X	X	
HERBACEOUS PERRENIALS AND SUB-SHRUBS				
Encelia californica	CA Bush Sunflower	X	X	
Eriophyllum c. confertiflorum	Golden Yarrow	X	X	
Lotus scoparius	Deer Weed	X	X	
Lupinus succulentus	Arroyo Lupine	X	X	
Mimulus aurantiacus	Orange Bush Monkey Flower	X	X	
Oenothera elata hirsutissima	Evening Primrose	X	X	
GRASSES				
Elymus g. glaucus	BlueWild Rye			X
Nassella pulchra	Purple Needlegrass	X	X	

PERFORMANCE STANDARDS AND MONITORING

1. Revegetation of a minimum of 2.27 acres is required, as well as replacement of all native trees lost in a ratio of 3:1, and staking of willow and mulefat in the footprint of the former berm and in the floodplain area to the west, as well as the planting of the following numbers of trees along the contours of the slopes:
   - five one-gallon coast live oaks, and 10 acorns in tree tubes
   - 15 stem cuttings propagated from the cottonwood
   - three one-gallon California walnuts, and 10 nuts planted in tree tubes
   - 15 one-gallon sycamore trees
   - 100 willow stake cuttings
   - 10 one-gallon toyon
   - 10 one-gallon Mexican elderberry

2. All plantings shall take place in the Fall, following the first wetting rains. Hand watering will be provided weekly should the rains be sparse and continued as needed to keep the plants going. All irrigation will be provided for up to two years post planting.

3. All trees and cuttings will be planted in a clumped, randomly spaced pattern to emulate natural recruitment.

4. All tree, cutting and seed materials used shall be either taken directly from the site or collected within the local watershed.

5. Success Criteria for plant establishment is as follows:
   a) At least 80% of all planted trees and cuttings of each species shall survive the first year.
   b) After the first year, 100% survival of all planted trees and cuttings and/or attainment of 75% cover after three years, and 90% cover of the vegetation installed after five years.
   c) No single species shall constitute more than 50% of the vegetative cover.
   If the survival and cover establishment goals are not met, additional planting will occur, and replacement plant monitoring shall continue for a total of five years post planting, using the same cover and survival guidelines.

6. Success Criteria for Exotic plant removal is as follows:
   a) Exotic trees and ornamental vegetation on the berm and near structures in the 12 acre floodplain area behind the berm will be removed by grubbing during the berm excavation and structure removal process and disposed of in an area which will prevent its re-establishment.
   b) Additional weed control and maintenance will be conducted weekly at first, and then as needed for two years post planting.
   c) No woody invasive species will be present in the berm footprint area, along the revegetated toe of the slope or within the hydroseeded area of the floodplain.
   d) Herbaceous invasive cover will not exceed 5% cover in these areas.
   e) Whenever possible, hand or hand-operated power tools will be used to remove invasive species.
   f) If control of non-native invasive species cannot be conducted manually, then use of a herbicide will be applied in concordance with state and federal laws. No herbicides shall be used where Threatened or Endangered species occur. No herbicides shall be used if wind velocity exceeds five miles per hour. All herbicides shall be mixed with dye to monitor distribution.
   g) In areas where there is a possibility of coming into contact with water, only those herbicides approved for aquatic use may be used.

PLANTING GUIDELINES

Local Plant Stock

All plant material and seeds used in this restoration must be of local origin stock, preferably taken from natural stocks within Topanga Canyon. They may also originate from closely adjacent lands within a 10-mile radius of the site, or as agreed upon by the State Park ecologist. Seed should be hand broadcast or the hydro seed device cleaned before use on site and between different areas to prevent unwanted species from becoming distributed in all areas.

Collecting Propagation Materials

Native seeds should be harvested according to the needs of the species. Most seeds specified will be harvested in late summer or early fall. Scarification or heat treatment will be conducted as needed according to each species needs. Seeds will be cleaned and stored appropriately until planted out in the California Department of Parks and Recreation Angeles District nursery or directly on to the site.

Cuttings of roots and shoots of native shrubs and trees will be conducted according to the needs of the species. Willow and mule fat cuttings will be a minimum of three feet long, and contain at least one viable node.

In addition to growing plants from seeds in the nursery, the use of direct seeding on the site is also recommended. The seeded areas within the project site will be covered with 2-4 inches of mulch generated from the site.

Planting

A plan that depicts the planting areas is found in Figure 2.

Preparation of the soil is recommended prior to planting. Disking or other methods deemed necessary to loosen compacted areas should be accomplished following the removal of non-native vegetation. The slope area should be stabilized using jute or other erosion control fabric prior to planting. Mulch generated by the removal of the non-invasive exotic ornamental vegetation should be spread over the area to revitalize the soil and discourage weedy growth.

All plants should be planted with minimal soil disturbance, and only when no weed re-growth occurs after mechanical removal. It is recommended that at the time of planting, there should be deep watering to aid establishment.

Figure 2. Rodeo Grounds Berm Replanting Plan

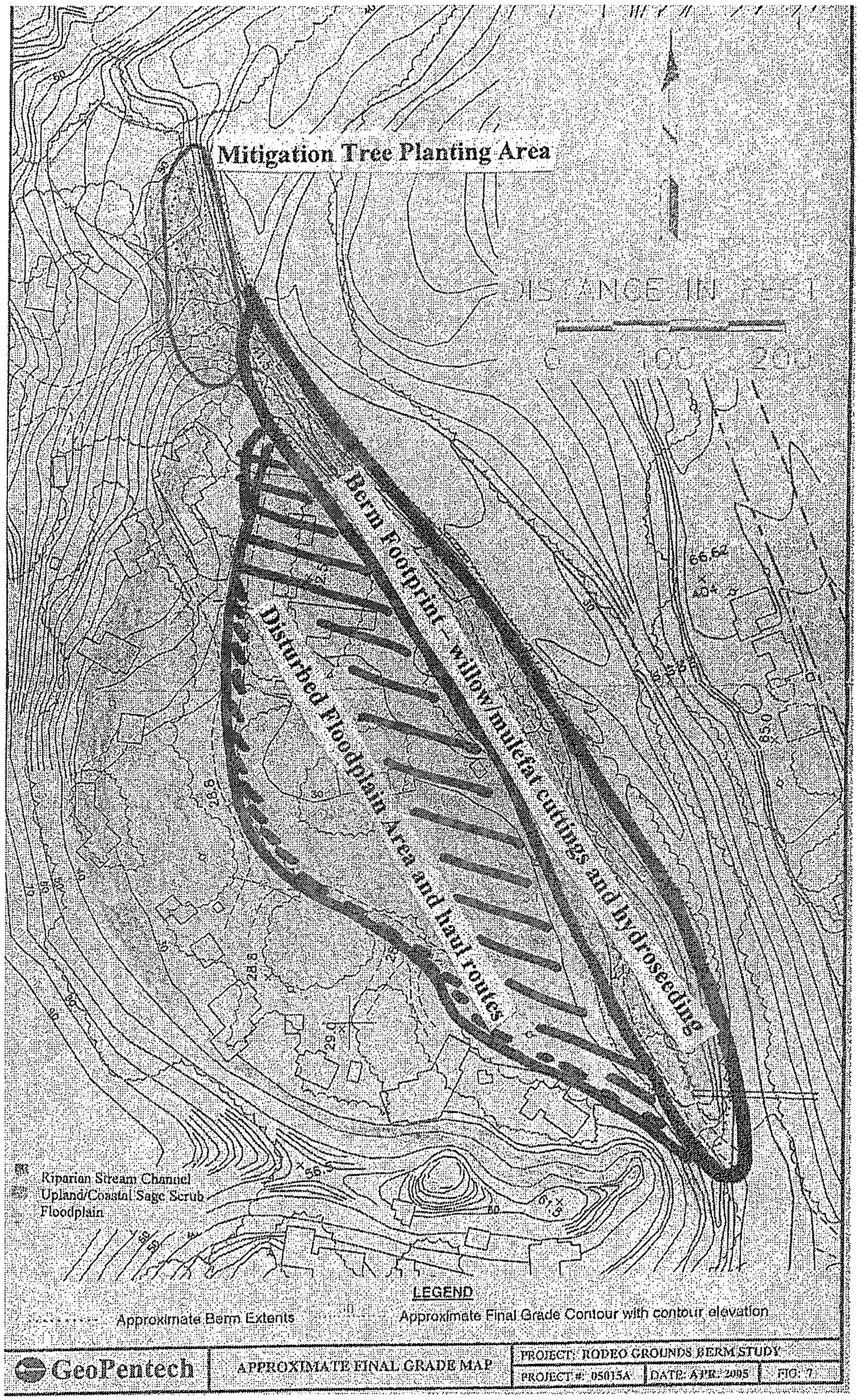


Table 2. Recommendations for Plant Propagation

Scientific Name	Common Name	Cutting	Direct Seeding
TREES			
Alnus rhombifolia	White Alder	X	
Heteromeles arbutifolia	Toyon		X
Juglans californica	CA Walnut		X
Platanus racemosa	CA Sycamore	X	
Populus f. fremontii	Fremont Cottonwood	X	
Quercus agrifolia	Coast Live Oak		X
Salix exigua	Narrow-leaf Willow	X	
Salix laevigata	Red Willow	X	
Salix lasiolepsis	Arroyo Willow	X	
Sambucus mexicana	Mexican Elderberry		X
Umbellularia californica	California Bay		X
SHRUBS			
Baccharis salicifolia	Mule Fat	X	
Eriogonum cinereum	Ashyleaf Buckwheat		X
Eriogonum fasciculatum	CA Buckwheat		X
Malosma laurina	Laurel Sumac		
Rhus integrifolia	Lemonadeberry		
Salvia mellifera	Black Sage		X
HERBACEOUS PERRENIALS AND SUB-SHRUBS			
Encelia californica	CA Bush Sunflower		X
Eriophyllum c. confertiflorum	Golden Yarrow		X
Lotus scoparius	Deer Weed		X
Lupinus succulentus	Arroyo Lupine		X
Mimulus aurantiacus	Orange Bush Monkey Flower		
Oenothera elata hirsutissima	Hooker's Evening Primrose		X
GRASSES			
Elymus g. glaucus	BlueWild Rye		X
Nassella pulchra	Purple Needlegrass		

Fertilizers

Fertilizer should not be used on the restoration site. Exotic weeds are better able to utilize fertilizer than natives, and they are less competitive in the absence of fertilizer. Soil amendment/compost (free of weed seed) may be used where appropriate. Cultivars or native plants that do not occur within native habitats at Topanga State Park shall not be planted.

Hydroseeding

The hydroseed mix should contain seeds gathered on site or native to the site, virgin wood fiber, mycorrhizal innoculant, and M tackifier.

Timing of Plant Installation

Planting of container plants, cuttings, or seed should occur just prior to the rainy season (Fall). Plants may need to be hand watered until there is consistent precipitation or until plants become established.

Mulching

Mulch generated by the removal of the non-invasive exotic ornamental vegetation should be spread over the planting area along the toe of the slope and within the berm footprint and adjacent disturbed floodplain area to a depth of 2-4 inches, to revitalize the soil and discourage weedy growth. No mulch should be directly next to tree or cutting trunks or leaders.

Table 3. Planting Guidelines

Scientific Name	Common Name	Spacing (Feet)	Lb./ acre seed	Container Size (gal)	Cutting/ stakes	Cost per unit	No units	Total Cost
TREES								
Alnus rhombifolia	White Alder	20	0	1	3' lengths	5.00	20	100.00
Heteromeles arbutifolia	Toyon	4	2	1	0	10.00	2	20.00
Juglans californica	CA Walnut	20	0	1		1.00	10	10.00
Platenus racemosa	CA Sycamore	20	0	1		5.00	20	100.00
Populus fremontii	Fremont Cottonwood	20	0	1		5.00	15	75.00
Quercus agrifolia	Coast Live Oak	20	0	1		1.00	10	10.00
Salix exigua	Narrow-leaf Willow	5	0		3' lengths	1.00	50	50.00
Salix laevigata	Red Willow	10	0		3' lengths	1.00	50	50.00
Salix lasiolepis	Arroyo Willow	10	0		3' lengths	1.00	50	50.00
Sambucus mexicana	Mexican Elderberry	15	4	1		20.00	4	80.00
Umbellularia californica	California Bay	20	0	1		1.00	5	5.00
SHRUBS								
Baccharis salicifolia	Mule Fat	4	0	1	3' lengths	1.00	50	50.00
Eriogonum cinereum	Ashyleaf Buckwheat	4	6	1		15.00	6	90.00
Eriogonum fasciculatum	CA Buckwheat	4	8	1		4.00	16	64.00
Malosma laurina	Laurel Sumac	6	2	1		15.00	4	60.00
Rhus integrifolia	Lemonadeberry	6	2	1		20.00	4	80.00
Salvia mellifera	Purple sage	4	2	1		24.00	4	96.00
PERRENIALS								
Encelia californica	CA Bush Sunflower	4	2	1		24.00	4	96.00
Eriophyllum confertiflorum	Golden Yarrow	4	2	1		24.00	4	96.00
Lotus scoparius	Deer Weed		4			15.00	8	120.00
Lupinus succulentus	Arroyo Lupine		8			9.00	16	144.00
Mimulus aurantiacus	Stickey Monkey Flower	6	1	1		25.00	3	75.00
Oenothera hookeri	Evening Primrose		2			12.00	4	48.00
GRASSES								
Elymus glaucus	Western Wild Rye		8			8.00	8	64.00
Nassella pulchra	Purple Needlegrass			plug		1.00	50	50.00

SITE PROTECTION

Signage
Initially site protection should consist of "Area Closed Habitat Restoration In Progress" signs along the creek bank and road. Should any significant damage occur to the site from vandalism or visitor usage, site fencing should be installed.

Site Delineation
Delineation of all habitat types and areas of specific restoration action included in the restoration document and plan drawings must be finalized with the State Park ecologist through on-site meetings prior to the start of work. Delineated habitats and areas of specific activities are subject to change in order to better protect any sensitive natural resources.

Avoidance of Impact to Sensitive Resources
Although the Rodeo Grounds Berm area is home to several special status species, due to the highly disturbed and developed nature of the site, no sensitive, candidate, or special status species are expected to depend on the project site to such a degree that the temporary project restoration window will have a significant effect on their survival or general behavior. All construction activity will take place outside of migration season (December – June) for federally listed southern steelhead trout, spring breeding season of amphibians, and spring nesting for raptors and migratory birds.

- Raptor trees: Eucalyptus removal on the berm will occur in the summer and fall months and should not impact any potentially nesting raptors. Surveys will be conducted by a State Park Resource Ecologist to identify any nesting occurrences prior to removal. If raptors are nesting, those trees will be left in place until young have fledged. The project area is closely associated with many existing sycamore and willow trees, which provide alternate perching and nesting opportunities.

- Disturbed upland/coastal sage scrub: In the region identified as disturbed upland/coastal sage scrub, grading will be kept to the minimum extent necessary. Herbicide use will be kept to a minimum, involving localized and discrete application if necessary.

- Stream Channel and Adjacent Riparian: Herbicide use will be kept to a minimum, involving localized and discrete application of a wetland-safe variety (e.g. Rodeo).

- Landform work associated with the berm removal and stream channel restoration will not take place during the rainy season and any flow will be suitably diverted during the berm excavation if the channel is not dry.

Regulatory Agency Compliance, and Encroachment Permits
The California Department of Parks and Recreation has been working with the CA Coastal Commission, the CA Department of Fish and Game, CA Regional Water Quality Control Board, and Los Angeles County Department of Regional Planning to acquire all foreseeable necessary environmental permits. These permits are in the process of being issued.

MONITORING

Methodology

Restoration monitoring should occur annually in May and September, according to CDFG standards. Six permanent vegetation transects should be installed and benchmarked to adequately represent the conditions of the revegetated areas, including along the toe of the slope, within the former berm footprint and the immediately adjacent floodplain area to the west. See Figure 2 for delineation of these areas. The initial condition data will be collected following site preparation and initial planting to establish a baseline. Each transect should consist of 25 meters oriented to provide adequate representation of the revegetated area. Sampling should consist of enumerating the number of individuals of each species, and the amount of canopy cover (length) of each species encountered along the tape. Height of tree species will also be measured. Bare ground should also be enumerated in this manner. Dead exotic plant material should be enumerated in the surveys.

The total number of individuals of each species will be tallied, and the percent of cover can then be calculated for each species by adding up the total number of centimeters or meters covered by each species along the transect and dividing this by 25 meters. Since there can be both on ground and above ground cover (trees), the total amount of cover for the transect can potentially be greater than 100%. These cover values will then be compared to the target performance criteria.

Note: Alternate monitoring methodology may be employed if reviewed and agreed upon with the State Park representative ecologist.

Photodocumentation

Permanent benchmarks will be established and photographs taken from a consistent orientation and field-of-view twice yearly, in May and September.

Monitoring Report

The annual monitoring report is due to be submitted to CDFG by January 1 of each calendar year. It should consist of a spreadsheet detailing the total number of individuals of each species, average height of tree species, and percent canopy cover values of individual species and growth-form categories along with a brief memo describing the results of the sampling. The report should provide recommendations for any actions needed to achieve or exceed the target success criteria set for each year. The report shall also include recommendations for actions needed to change or adapt the management strategy in order to meet the criteria, i.e., install additional plants of a particular species. Photographs should also be included. A final report must be submitted by June 2012 documenting the restoration process and evaluating achievement of the success criteria.

RESPONSIBLE ENTITIES

The California Department of Parks and Recreation, Angeles District, is responsible for developing the restoration and monitoring plan and acquiring and overseeing the contractor to perform the restoration activities, maintenance, and monitoring. Restoration monitoring will be the responsibility of a contractor, with the Angeles District conducting additional oversight monitoring until June 2012. The contractor shall provide yearly monitoring reports to the Angeles District, who will then ensure that the success criteria are met.

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APPENDIX A

Vascular Plants Observed at Rodeo Grounds Restoration Area
Carl Wishner, Envicom, Inc.
April 20, 2005

GROUP Family *Scientific Name*	Common Name
FERNS AND ALLIES	
Equisetaceae	
Equisetum telmateia braunii	Giant horsetail
CONIFERS	
Pinaceae	
**Cedrus deodara*	Deodar cedar
**Pinus* spp.	Pine
Podocarpaceae	
**Podocarpus* sp.	Podocarp
FLOWERING PLANTS -- DICOTS	
Aizoaceae	
**Carpobrotus edulis*	Hottentot-fig
Anacardiaceae	
Malosma laurina	Laurel leaf sumac
Rhus integrifolia	Lemonade berry
Apiaceae	
**Conium maculatum*	Poison hemlock
**Foeniculum vulgare*	Fennel
Apocynaceae	
**Nerium oleander*	Oleander
**Vinca major*	Greater periwinkle
Araliaceae	
**Hedera* sp.	Ivy
Asteraceae	
Ambrosia psilostachya	Western ragweed
Artemisia douglasiana	Mugwort
Baccharis salicifolia	Mule fat
Brickellia californica	California brickellbush
**Centauria melitensis*	tocalote
**Conyza bonariensis*	Buenos Aires horseweed
Conyza canadensis	Horseweed
**Chamomilla suaveolens*	Pineapple weed
**Delairea odorata*	Cape-ivy
**Hypochaeris glabra*	Smooth cat's-ear
Malacothrix saxatilis tenuifolia	Cliff-aster
**Picris echioides*	Bristly ox-tongue
**Sonchus asper*	Prickly sow-thistle
**Taraxacum officinale*	Dandelion

Venegasia carpesioides	Canyon sunflower
Xanthium strumarium	Cocklebur
Betulaceae	
Alnus rhombifolia	White alder
Brassicaceae	
**Brassica nigra*	Black mustard
**Hirschfeldia incana*	Hoary mustard
**Lobularia maritima*	Sweet alyssum
**Raphanus sativus*	Wild radish
**Sisymbrium officinale*	Hedge-nettle
**Sisymbrium orientale*	Oriental mustard
Cactaceae	
**Opuntia ficus-indica*	Tuna
Caryophyllaceae	
**Stellaria media*	Common chickweed
Chenopodiaceae	
Chenopodium ambrosioides	Mexican-tea
Convolvulaceae	
Calystegia macrostegia cyclostegia	Chaparral honeysuckle
Cucurbitaceae	
Marah macrocarpus	Wild cucumber
Datiscaceae	
Datisca glomerata	Durango root
Euphorbiaceae	
**Euphorbia terracina*	Terracina spurge
Fabaceae	
Lupinus succulentus	Arroyo lupine
Medicago polymorpha	Bur-clover
**Melilotus indicus*	Yellow sweetclover
**Spartium junceum*	Spanish broom
**Trifolium hirtum*	Rose clover
Hydrophyllaceae	
Phacelia grandiflora	Large-flowered phacelia
Lamiaceae	
**Mentha* sp.	mint
Salvia mellifera	Black sage
Malvaceae	
**Hibiscus* sp.	Hibiscus
**Lavatera cretica*	Crete weed
Moraceae	
**Ficus carica*	Edible fig
Myoporaceae	
**Myoporum laetum*	Myoporum
Myrtaceae	
**Eucalyptus* spp.	Gum

Nyctaginaceae	
Bouganvillea sp.	Bouganvillea
Oleaceae	
Ligustrum sp.	Privet
Oxalidaceae	
Oxalis pes-caprae	Bermuda-buttercup
Plantaginaceae	
Plantago lanceolata	Ribwort
Plantago major	Common plantain
Plumbaginaceae	
Plumbago capensis	Cape plumbago
Polygonaceae	
Eriogonum cinereum	Ashy-leaf buckwheat
Rumex crispus	Curly dock
Rumex sp.	Dock
Rhamnaceae	
Ceanothus spinosus	Greenbark ceanothus
Rosaceae	
Chaenomeles sp.	Fruiting quince
Rosa californica	California rose
Rosa sp. (cultivated)	Rose
Rutaceae	
Citrus sp.	Citrus
Salicaceae	
Salix exigua	Narrow-leaf willow
Salix laevigata	Red willow
Salix lasiolepis	Arroyo willow
Scrophulariaceae	
Veronica anagallis-aquatica	Water speedwell
Simaroubaceae	
Ailanthus altissima	Tree-of-heaven
Solanaceae	
Nicotiana glauca	Tree tobacco
Tropaeolaceae	
Tropaeolum majus	Garden nasturtium
FLOWERING PLANTS -- MONOCOTS	
Agavaceae	
Agave americana	Century plant
Yucca sp. (soft tip)	Soft-tip yucca
Arecidae	
*Undetermined (?*Jacobea*)	Palm
Washingtonia sp.	Fan palm
Cyperaceae	
Cyperus eragrostis	Tall sedge

**Cyperus involucratus*	Umbrella sedge
Iridaceae	
Sisyrinchium bellum	Blue-eyed-grass
Juncaceae	
Juncus patens	Common rush
Poaceae	
**Avena barbata*	Slender wild oat
**Bromus catharticus*	Rescue grass
**Bromus diandrus*	Ripgut grass
**Bromus hordeaceus*	Soft-chess
**Bromus madritensis rubens*	Red brome
**Ehrharta erecta*	Ehrharta
**Festuca arundinacea*	Reed fescue
**Hordeum murinum*	Foxtail barley
Paspalum distichum	Paspalum
**Piptatherum miliaceum*	Mountain-millet
**Stenotaphrum secundatum*	St. Augustine grass

* denotes introduced species

Appendix A, Table 1
Topanga State Park Lower Topanga Canyon Acquisition Final Interim Management Plan and Environmental Impact Report
Sensitive and Listed Plants
Known to Occur in Topanga Canyon

Scientific Name	Common Name	Status
Astragalus brauntonii	Braunton's milkvetch	FE; List 1B, 3-3-3
Astragalus pynostachyus var. *lanosissimus*	Ventura Marsh milkvetch	FE;SE; List 1B, 3-3-3
Atriplex parishii	Parish's brittlescale	List 1B, 3-3-2
Calochortus plummerae	Plummer's mariposa lily	List 1B, 2-2-3
Camissonia lewisii	Lewis' evening primrose	List 3, ?-?-2
Comarostaphylis diversifolia ssp. *planifolia*	summer holly	Locally rare
Dichondra occidentalis	western dichondra	List 4, 1-2-1
Dudleya cymosa var. *ovatifolia*	Santa Monica Mountains dudleya	FT; List 1B, 3-2-3
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	List 1B, 2-3-2
Mucronea californica	California spineflower	List 4, 1-2-3
Nama stenocarpum	mud nama	List 2, 3-2-1
Polygala corunta var. *fishae*	Fish's milkwort	List 4, 1-1-2
Sidalcea neomexicana	salt spring checkerbloom	List 2, 2-2-1

See Appendix A, Tables 3, 4, and 5 for listing code definitions
Information compiled from CNDDB records (2001), RCDSMM reports on watershed and canyon surveys, species observations by State Park ecologists, and Topangaonline.com.

Appendix A, Table 2
Topanga State Park Lower Topanga Canyon Acquisition Final Interim Management Plan and Environmental Impact Report Sensitive and Listed Animals Known to Occur in Topanga Canyon

Scientific Name	Common Name	Status
	Fish	
Gila orcutti	arroyo chub	FSC;CSC; FS sensitive
Eucycloglobius newberryi	tidewater goby	FE; Critical habitat designated
Oncorhynchus mykiss irideus	southern steelhead trout	FE, CSC; Critical habitat designated
	Amphibians	
Taricha torosa torosa	California newt	CSC
	Reptiles	
Anniella pulchra pulchra	silvery legless lizard	CSC
Clemmys marmorata pallida	southwestern pond turtle	FSC; CSC; DFG Protected; FS sensitive; BLM sensitive
Cnemidophorus tigris multiscutatus	coastal western whiptail	FSC
Lampropeltis zonata pulchra	San Diego Mountain kingsnake	FSC; CSC; DFG Protected; FS sensitive
Lichanura trivirgata	rosy boa	FSC; BLM sensitive
Phrynosoma coronatum blainvillei	San Diego coast horned lizard	FSC;CSC; DFG protected (full species); FS sensitive
Phyrnosoma coronatum frontale	California horned lizard	CSC; DFG protected (full species); BLM sensitive
Salvadora hexalepis virguleta	coast patch-nosed snake	FSC; CSC
Thamnopsis hammondi	two-striped garter snake	CSC; DFG Protected; FS sensitive; BLM sensitive
	Mammals	
Euderma maculatum	spotted bat	FSC; CSC; BLM sensitive; WBWG High Priority
Eumops perotis	western mastiff bat	FSC; CSC; BLM sensitive; WBWG High Priority
	Birds	
Accipiter cooperi	Cooper's hawk	CSC
Aquila chrysaetos	Golden eagle	CSC
Asio otus	Long-eared owl	CSC
Circus cyaneus	Northern harrier	CSC
Dendroica petechia	Yellow warbler	CSC
Icteria virens	Yellow-breasted chat	FWS: MNBMC; PIF; Audubon Ca WL
Lanius ludovicianus	Loggerhead shrike	FSC; CSC; FWS: MNBMC
Pelecanus erythrorhynchos	American white pelican	CSC; Audubon Ca WL
Pelecanus occidentalis	Brown pelican	FE; DFG Fully protected
	Insects	
Danaus plexippus	monarch butterfly	CSC
Coelus globosus	globose dune beetle	FSC
Neduba longipennis	Santa Monica shieldback katydid	CR; FSC

See Appendix A, Tables 3, 4, and 5 for listing code definitions.
Information compiled from CNDDB records (2001), RCDSMM reports on watershed and canyon surveys, species observations by State Park ecologists, and Topangaonline.com.

Appendix A, Table 3
Topanga State Park Lower Topanga Canyon Acquisition Final Interim Management Plan and Environmental Impact Report
Plant and Animal Sensitivity Guidelines
State and Federal Listed Species Designations

***FE**	Federal Endangered species	Listed as federally Endangered under the Federal Endangered Species Act (ESA), 1973 as amended. Taxa are in danger of becoming extinct throughout all or a significant portion of their range.
FT	Federal Threatened species	Listed as federally Threatened under the Federal Endangered Species Act (ESA). Taxa, which are likely to become endangered in the foreseeable future in the absence of special protection.
FP	Federally proposed for listing	Taxa that are Proposed in the Federal Register to be listed as Endangered or Threatened under Section 4 of the ESA.
***FSC**	Federal Species of Special Concern	The United State Fish and Wildlife Service (FWS) suggests that this term, because it holds no official status under the Federal ESA, be considered as a "term-of-art" that describes the entire realm of taxa whose conservation status may be of concern to the Service.
***SE**	State listed Endangered	Native California taxa, which are in serious danger of becoming extinct throughout all or a significant portion of its range. Listed as Endangered under the California Endangered Species Act (CESA).
ST	State listed Threatened	Native California taxa, which although not presently threatened with extinction, is likely to become an Endangered species in the foreseeable future in the absence of special protection and management efforts. Listed as Threatened under the CESA.
SR	State listed Rare	Native California taxa, which although not presently threatened with extinction, is likely to become a Threatened species in the foreseeable future in the absence of special protection and management efforts. Listed as Rare under the CESA.
SC	State Candidate for listing as Endangered, Threatened, or Rare.	Native California taxa, which are not presently threatened with extinction. However, the species, subspecies or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens.
CSC	California Species of Special Concern	The California Department of Fish and Game (DFG) provides a list of those species that may not warrant an official listing under the CESA, but do warrant watching closely due to declining habitat availability or a restricted distribution in California.
***DFG**	California Fully protected or Protected species	Fully protected species may not be possessed or taken without a permit from the Fish and Game Commission and/or the California Department of Fish and Game.

***FE**: The official Federal listing of Endangered, Threatened, or Proposed animals is published in the Federal Register, 50 CFR 17.11.

***FSC**: Plants and animals with the FSC status were once compiled in the Category 2 (C2) Candidate list. The C2 designation was reclassified and eliminated in 1996 (61 FR 7457; February 28, 1996) and many of the species on that list were then defined under the term "Federal Species of Concern." However this too has been eliminated by the Service and is only included here following the DFG lead as provided for informational purposes only. California State Parks believes that using these species in sensitive species list it furthers our effort towards natural resource protection.

***SE**: The official California listing of Endangered and Threatened for animals is contained in the California Code of Regulations, Title 14, Section 670.5. State listing is pursuant to §1904 (Native Plant Protection Act of 1977) and §2074.2 and 2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing of Endangered, Threatened, and Rare species of plants and animals.

***DFG**: Information on Fully protected species can be found in the Fish and Game Code (birds at §3511, reptiles and amphibians at §5050, and fish at §5515). Information on Fully protected fish can be found in the Fish and Game Code of Regulations, Title 14, Division 1, Chapter 2, Article 4, §5.93. Information on native amphibians can be found in Chapter 5, §41 and Protected native reptiles at §42.

Appendix A, Table 4
Topanga State Park Lower Topanga Canyon Acquisition Final Interim Management Plan and Environmental Impact Report
Plant and Animal Sensitivity Guidelines
Additional State, Federal, Local Species Conservation and Sensitivity Designations

BLM sensitive	The Bureau of Land Management (BLM) defined sensitive species	BLM defines sensitive species as " those species that are under (1) status review by the Service; or (2) whose number are declining so rapidly that Federal listing may become necessary; or (3) with typically small and widely dispersed populations; or (4) those inhabiting ecological refugia or other specialized or unique habitats."
FS sensitive	Forest Service (FS) defined sensitive species.	The FS participates in recovery programs with DFG and the FWS to restore declining populations and protect habitats. A FS "sensitive species" programs identifies and manages species whose populations are declining.
FWS: MNBMC	FWS Migratory Nongame Birds of Management Concern	Species of migratory nongame birds that are considered to be of concern in the US because of (1) documented or apparent population declines, (2) small or restricted populations or (3) dependence on restricted or vulnerable habitats.
Audubon: Cal WL	The Audubon Society's state WatchList for California.	The state WatchLists were developed using the Partners in Flight (PIF) data and prioritization process. The state lists are an additional tool designed to help conserve local bird populations.
PIF WatchList	Partners in Flight (PIF) WatchList for California	PIF complies a watch list, which identifies North American bird species that are faced with population decline, limited geographic range, and/or threats such as habitat loss on their breeding and wintering grounds.
WBWG high priority	Western bat working group (WBWG)	The WBWG designates species as High Priority that are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology, and known threats.

Appendix A, Table 5
Topanga State Park Lower Topanga Canyon Acquisition Final Interim Management Plan and Environmental Impact Report
Plant and Animal Sensitivity Guidelines
California Native Plant Society (CNPS) Sensitivity Lists and Rarity (R), Endangered (E), and Distribution (D) [R-E-D] Codes

List 1A	Species presumed extinct in California
List 1B	Plants rare, threatened, or endangered in California and elsewhere
List 2	Plants rare, threatened or endangered in California, but more common elsewhere
List 3	Plants about which more information is needed
List 4	Plants of limited distribution. A watch list for species that need to be monitored.
Rarity (R)	
1	Rare but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
2	Distributed in a limited number of occurrences, occasionally more if each occurrence is small
3	Distributed in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported.
Endangered	
1	Not Endangered
2	Endangered in a portion of its range
3	Endangered throughout its range
Distribution	
1	More or less widespread outside California
2	Rare outside California
3	Endemic to California

RODEO GROUNDS BERM RESTORATION
FIELD NOTES

WETLANDS DELINEATION SURVEY

20 April 2005

Revised
7 December 2005

Observers:
Josh Burnam and Ken Wong, US Army Corps of Engineers
Carl Wishner, Envicom
Rosi Dagit, RCD of the Santa Monica Mountains

Objective: Delineate the waters of the US and any jurisdictional wetlands within the proposed Rodeo Grounds Berm Restoration project area.

Location: The Rodeo Grounds Road Berm is located on Topanga Creek, approximately 2,500 feet upstream from the Pacific Ocean, in Topanga Creek State Park, Topanga, CA.

Background: The berm was constructed between the late 1960's and 1980. According to local informants, the fill materials were obtained from the re-paving of Lincoln Blvd in 1969 and from along Topanga Canyon Blvd. following the 1980 flood.

The berm extends roughly north to south, forming a barrier to natural flood inundation patterns and has re-directed the flow of the creek channel to the east. Elevation within the project area remains flat, however a large area of sediment buildup causes a slight rise in channel elevation upstream of the berm.

The berm is approximately 1,000 feet long and varies in width from 40-100 feet. Portions of the banks are covered with concrete covered riprap. The surface area of the berm is estimated to be 1.8 acres (80,000 square feet). The volume of the berm is estimated to be 19,000 cubic yards. Preliminary soils characterization found that the upper 8 feet in the north section of the berm qualifies as CA Hazardous Waste for lead contamination.

Restoration Proposal: In order to restore the natural creek hydrology, provide access to the entire floodplain, and restore access and habitat for endangered southern steelhead trout, the landowner, CA Department of Parks and Recreation (CDPR) has determined that removal of the berm is necessary.

Funding from the CA Coastal Conservancy has been obtained to develop the Mitigated Negative Declaration (MND) documents and permit applications related to the berm removal and restoration.

In order to complete these documents, the areas of waters of the US, jurisdictional wetlands and any necessary mitigation requirements are needed.

Site Observations: We started at the south end of the berm where it crosses Topanga Creek at an instream crossing. We walked along the berm to the north end. Due to the installation of the berm and impacts related to the structures protected by the berm, it was felt that the likelihood of any wetlands remaining to the west of the berm was slim. Efforts were thus focused on the east side along the berm bank, within the creek channel and over to the eastern creek bank.

Rosi offered to provide copies of the in-stream habitat mapping data collected since 2001 to document previous conditions of this reach. This data is being compiled for incorporation into the MND and documents that the channel is usually dry, with only sub-surface flows for much of the previous 4 years.

Since October 2004, the Topanga Creek Watershed received approximately 62 inches of rain, raising the creek level and causing above normal flows. This is the highest precipitation ever recorded for this area since the 1920's.

We hiked to the north end of the large Arundo patch on the northwest bank and started our investigation. Ken and Josh tried digging into the banks, but found mostly cobble and gravel beds, with no hydric soils.

Josh noted that some riffle-pool complexes currently present might qualify as a special aquatic site under the Clean Water Act.

We crossed to the east side of the channel, and found the same sediment mix, with no hydric soils.

Hiking back to the upstream end of the berm, we concentrated on examining the banks on the east side, given that the berm is concrete on the west bank.

Soils at all sites were predominantly coarse grain materials with evidence of oxidized root channels and organic deposits scattered throughout. True hydric soils (evdidence of redox, sulfidic odor and gleying) adjacent to a willow/sycamore cover were noted on the east bank, between the wetted channel edge and the elevated sand deposit. Theoretically, the root complexes may have retained fine sediments during the prior storm events, whereas more exposed sections of the channel may have been scoured. This narrow strip was marked Site 1 and a field survey form completed. The vegetation development on the upland sand deposit was limited to *Arundo donax*. Rosi agreed to return and try to GPS the perimeter of the willow thicket

(*Salix lasiolepsis*), in order to estimate the area of the marginal wetland. Carl noted that the vegetation would be characterized as riparian hydrophytic habitat.

Removing the large Arundo patch with heavy equipment was discussed as a possible mitigation measure, in case temporary construction impacts to wetlands occurred at the site.

Continuing downstream in a small side channel along the east bank, we found another location with hydric soils, again associated with a willow thicket. This was marked as Site 2 and a survey form completed.

The main channel did not have any wetland development in this reach.

We continued down the small side channel to where it re-connected with the main channel at a small cascade. In this segment of the creek, the east bank is lined with concrete debris, with some on the west side as well. Willows (*Salix lasiolepsis*) and mulefat (*Baccharis salicifolia*) are the dominant vegetation, although we did note some wetland species, including cattails (*Typha latifolia*) (OBL), *Cyperus alternifolius*, (non-native) (OBL), *Datisca glomerata (FACW)* and Alder (*Alnus rhombifolia*)(FACW). The native, obligate (OBL) wetland grass *Paspalum distichum* was also found.

This entire segment was tested for hydric soils. Again, these soils exhibited some wetlands features, including organic deposits and oxidized root channels, but material was predominantly coarse-grained. Initially, we designated the first location below the cascade to have some hydric soil characteristics as Site 3, but on continuing downstream, we found that this site probably extended down to the bank below the mature cottonwood tree buried in the berm at the south end. We delineated this site as wetland due to the obligate plant species present in combination with the preponderance of other evidence.

We discussed ways to calculate area of wetlands, and agreed that it made sense to define the two separate channels as waters of the US, with the east bank segments and the small side channel along the western bank described as marginal wetlands. Carl marked these on the aerial photo and took it back to the office to make the calculations.

At this point, Josh and Ken left, and Carl and Rosi explored the area behind the berm to see if there was anything else that might qualify as a wetland. There was not.

WETLANDS AFFECTED

Thanks to the efforts of Jack Blok, cartographer at Envicom, and Carl's mapping, it appears that the following acreages are involved:

1.8 acres of fill removal and restoration of the berm footprint

1.5 acres of waters of the US are included in the project area slightly upstream to the southern end of the berm

0.3 acres of the project area qualifies as marginal wetlands. The marginal wetlands are broken up into two larger segments (.29 acres total) along the eastern bank of the channel and one smaller segment (0.01 acres) west of the channel along the berm.

The calculation of the area of floodplain behind the berm to be restored is not yet complete.

ATTACHMENTS:

1. Survey forms for Sites 1-4
2. List compiled by Carl Wishner for species noted on or within the berm restoration area
3. Photographs of the sites
4. Aerial Map showing site locations and boundaries of waters of US and marginal wetlands

Notes prepared by Rosi Dagit, 25 April 2005.
Reviewed and approved by Josh Burnam, Ken Wong and Carl Wishner.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Topanga Cyn Creek #1 Rodeo Grounds Berm	Date: 4/20/05
Applicant/Owner: CDPR	County: LA
Investigator: Joel Burnam + Ken Wisp	State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: ______ Transect ID: ______ Plot ID: ______

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. willows			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). ______

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
 ___ Stream, Lake, or Tide Gauge
 ___ Aerial Photographs
 ___ Other
___ No Recorded Data Available

Field Observations:

Depth of Surface Water: ______ (in.)

Depth to Free Water in Pit: ______ (in.)

Depth to Saturated Soil: ______ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
 ___ Inundated
 ___ Saturated in Upper 12 Inches
 ✓ Water Marks
 ✓ Drift Lines
 ✓ Sediment Deposits
 ___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
 ___ Oxidized Root Channels in Upper 12 Inches
 ___ Water-Stained Leaves
 ___ Local Soil Survey Data
 ___ FAC-Neutral Test
 ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): ______ Drainage Class: ______

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): ______

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0 -12"					Sandy
~~12" -15"~~		~~glade 3/10B~~			
12" -15		7.5 YR 3/2	glade 3/10B		~~sat~~ Sandy Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ✓ Sulfidic Odor
- ___ Aquic Moisture Regime
- ✓ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ✓ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: sulfidic odor.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Rodeo Grounds Berm, Topanga Creek	Date: 4/20/05
Applicant/Owner: CDPR	County: LA
Investigator: Josh Burnam + Ken Wong	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). ______

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 12 (in.)

Depth to Saturated Soil: 3 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): ______________________

Drainage Class: __________

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): ______________________

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12"		2.5YR 3/2			
12-15"	?				

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- X Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ✓ High Organic Content in Surface Layer in Sandy Soils
- ?Q Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Cannot penetrate 12-15" / Debris & sandy soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: 3 Rodeo Grounds Berm, Topanga Creek	Date: 4/20/05
Applicant/Owner: CDPR	County: LA
Investigator: JOSH BURNHAM + KEN WONG	State: CA
Do Normal Circumstances exist on the site? Yes **No**	Community ID:
Is the site significantly disturbed (Atypical Situation)? **Yes** No	Transect ID:
Is the area a potential Problem Area? **Yes** No (If needed, explain on reverse.)	Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). ______

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
  ___ Stream, Lake, or Tide Gauge
  ___ Aerial Photographs
  ___ Other
___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 4 (in.)

Depth to Saturated Soil: 2 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): ______________________

Drainage Class: ____________

Taxonomy (Subgroup): ______________________

Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Atypical because concrete has been discharged at site.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)

Wetland Hydrology Present? Yes No

Hydric Soils Present? ~~Yes No~~

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks: Atypical wetland. Strong hydrology; hydrophytic veg (OBLs)

No soils bc concrete in sfc layers

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Flooded Grasslands Basin, Topanga Applicant/Owner: CDPR Investigator: Josh Burnam + Ken Wong	Date: 4/20/05 County: LA State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? ~~Yes~~ No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: ____ Transect ID: ____ Plot ID: ____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. S. lasiolepis	S/T		9.		
2. B. salicifolia	S/T		10.		
3. A. [illegible]	S/T		11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). ____

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 3 (in.)

Depth to Saturated Soil: 3 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ✓ Saturated in Upper 12 Inches
- ___ Water Marks
- X Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): ______ Drainage Class: VWD
Field Observations
Taxonomy (Subgroup): ______ Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-15"		7.5YR3/2			

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- X Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- X Concretions
- X High Organic Content in Surface Layer in Sandy Soils
- X Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: Problem soil bc all sand but very high secondary indicators

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes No	(Circle)
Wetland Hydrology Present?	Yes No	
Hydric Soils Present?	~~Yes~~ No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

Vascular Plants Observed at Rodeo Grounds Restoration Area
April 20, 2005

GROUP Family *Scientific Name*	Common Name
FERNS AND ALLIES	
Equisetaceae	
Equisetum telmateia braunii	horsetail
CONIFERS	
Pinaceae	
**Cedrus deodara*	Deodar cedar
**Pinus* spp.	pine
Podocarpaceae	
**Podocarpus* sp.	Podocarp
FLOWERING PLANTS -- DICOTS	
Aizoaceae	
**Carpobrotus edulis*	Hottentot-fig
Anacardiaceae	
Malosma laurina	Laurel leaf sumac
Rhus integrifolia	Lemonade berry
Apiaceae	
**Conium maculatum*	Poison hemlock
**Foeniculum vulgare*	Fennel
Apocynaceae	
**Nerium oleander*	Oleander
**Vinca major*	Greater periwinkle
Araliaceae	
**Hedera* sp.	ivy
Asteraceae	
Ambrosia psilostachya	Western ragweed
Artemisia douglasiana	mugwort
Baccharis salicifolia	Mule fat
Brickellia californica	California brickellbush
**Centauria melitensis*	tocalote
**Conyza bonariensis*	Buenos Aires horseweed
Conyza canadensis	Horseweed
**Chamomilla suaveolens*	Pineapple weed
**Delairea odorata*	Cape-ivy
**Hypochaeris glabra*	Smooth cat's-ear
Malacothrix saxatilis tenuifolia	Cliff-aster
**Picris echioides*	Bristly ox-tongue
**Sonchus asper*	Prickly sow-thistle
**Taraxacum officinale*	Dandelion
Venegasia carpesioides	Canyon sunflower
Xanthium strumarium	Cocklebur

Betulaceae	
Alnus rhombifolia	White alder
Brassicaceae	
**Brassica nigra*	Black mustard
**Hirschfeldia incana*	Hoary mustard
**Lobularia maritima*	Sweet alyssum
**Raphanus sativus*	Wild radish
**Sisymbrium officinale*	Hedge-nettle
**Sisymbrium orientale*	Oriental mustard
Cactaceae	
**Opuntia ficus-indica*	Tuna
Caryophyllaceae	
**Stellaria media*	Chickweed
Chenopodiaceae	
Chenopodium ambrosioides	Mexican-tea
Convolvulaceae	
Calystegia macrostegia cyclostegia	Chaparral honeysuckle
Cucurbitaceae	
Marah macrocarpus	Wild cucumber
Datiscaceae	
Datisca glomerata	Durango root
Euphorbiaceae	
**Euphorbia terracina*	Terracina spurge
Fabaceae	
Lupinus succulentus	Arroyo lupine
Medicago polymorpha	Bur-clover
**Melilotus indicus*	Yellow sweetclover
**Spartium junceum*	Spanish broom
**Trifolium hirtum*	Rose clover
Hydrophyllaceae	
Phacelia grandiflora	Large-flowered phacelia
Lamiaceae	
**Mentha* sp.	mint
Salvia mellifera	Black sage
Malvaceae	
**Hibiscus* sp.	Hibiscus
**Lavatera cretica*	Crete weed
Moraceae	
**Ficus carica*	Edible fig
Myoporaceae	
**Myoporum lactum*	Myoporum
Myrtaceae	
**Eucalyptus* spp.	gum
Nyctaginaceae	
**Bouganvillea* sp.	Bouganvillea

Oleaceae	
Ligustrum sp.	privet
Oxalidaceae	
**Oxalis pes-caprae*	Bermuda-buttercup
Plantaginaceae	
**Plantago lanceolata*	ribwort
**Plantago major*	Common plantain
Plumbaginaceae	
**Plumbago capensis*	Cape plumbago
Polygonaceae	
Eriogonum cinereum	Ashy-leaf buckwheat
**Rumex crispus*	Curly dock
Rumex sp.	dock
Rhamnaceae	
Ceanothus spinosus	Greenbark ceanothus
Rosaceae	
**Chaenomeles* sp.	Fruiting quince
Rosa californica	California rose
**Rosa* sp. (cultivated)	rose
Rutaceae	
**Citrus* sp.	citrus
Salicaceae	
Salix exigua	Narrow-leaf willow
Salix laevigata	Red willow
Salix lasiolepis	Arroyo willow
Scrophulariaceae	
**Veronica anagallis-aquatica*	Water speedwell
Simaroubaceae	
**Ailanthus altissima*	Tree-of-heaven
Solanaceae	
**Nicotiana glauca*	Tree tobacco
Tropaeolaceae	
**Tropaeolum majus*	Garden nasturtium
FLOWERING PLANTS -- MONOCOTS	
Agavaceae	
**Agave americana*	Century plant
**Yucca* sp. (soft tip)	Soft-tip yucca
Arecidae	
*Undetermined (?*Jacobea*)	palm
Washingtonia sp.	Fan palm
Cyperaceae	
Cyperus eragrostis	Tall sedge
**Cyperus involucratus*	Umbrella sedge
Iridaceae	

Sisyrinchium bellum	Blue-eyed-grass
Juncaceae	
Juncus patens	Common rush
Poaceae	
**Avena barbata*	Slender wild oat
**Bromus catharticus*	Rescue grass
**Bromus diandrus*	Ripgut grass
**Bromus hordeaceus*	Soft-chess
**Bromus madritensis rubens*	Red brome
**Ehrharta erecta*	Ehrharta
**Festuca arundinacea*	Reed fescue
**Hordeum murinum*	Foxtail barley
Paspalum distichum	paspalum
**Piptatherum miliaceum*	Mountain-millet
**Stenotaphrum secundatum*	St. Augustine grass

* denotes introduced species

Rodeo Grounds Berm Removal & Restoration Project

- Berm (1.8 acres)
- Project Area (12.4 acres)
- Area of Potential Effect (21.4 acres)
- Waters of the US (1.5 acres)
- Marginal Wetlands (0.3 acres)

Map Created: May 2005
Revised: December, 2005
Data Source: USGS Aerial Photo from 2003
UTM NAD 83

WETLANDS DELINEATION PHOTOGRAPHS

20 April 2005

Figure 1. Upstream end of the Proposed Rodeo Grounds Berm Removal and Restoration Project Area

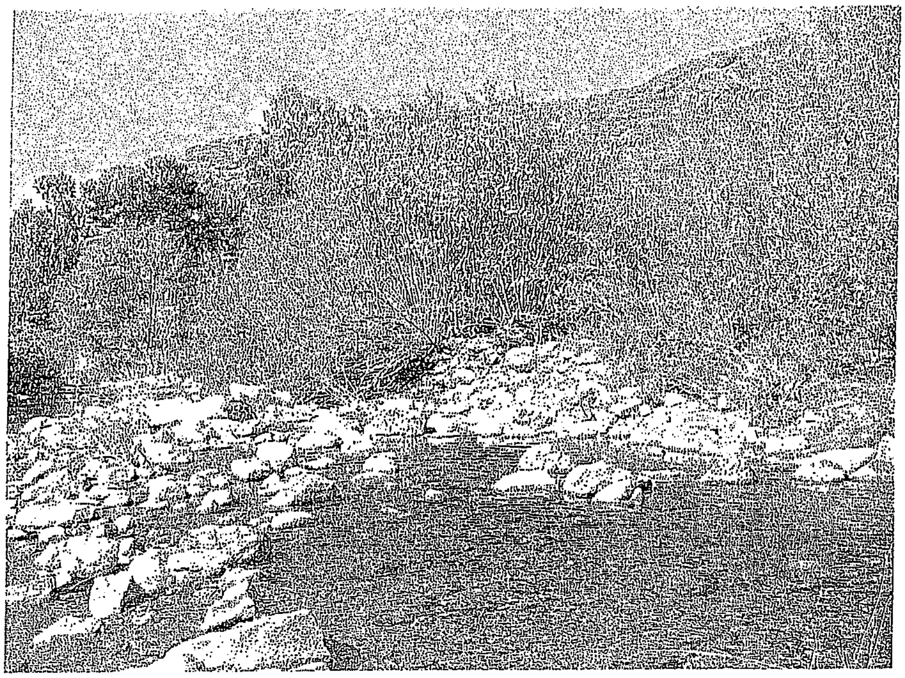


Figure 2. Arundo patch at North end of Project Area

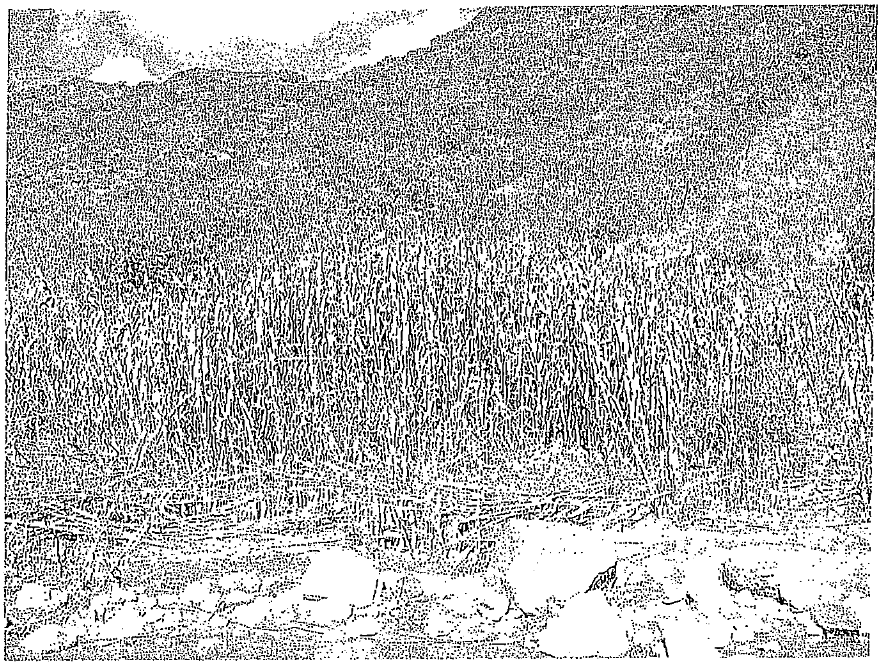


Figure 3. Upstream end of the Rodeo Grounds Berm, looking downstream

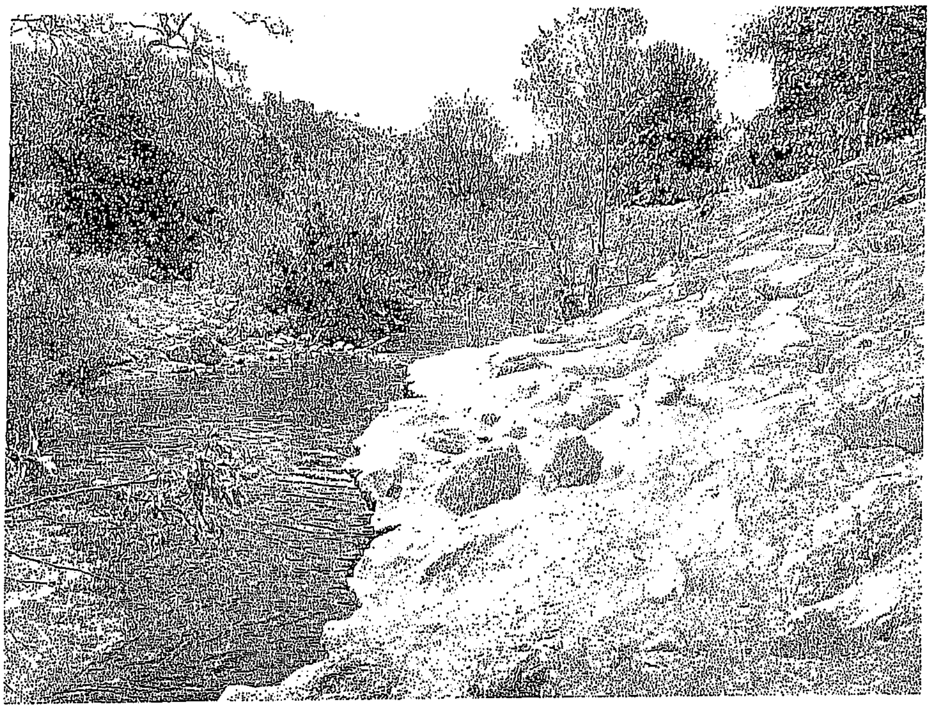


Figure 4. North end of Rodeo Grounds Berm, looking upstream

Figure 5. Undercut portion of the Rodeo Grounds Berm

Figure 6. Stream Reach looking upstream from south end of Rodeo Grounds Berm

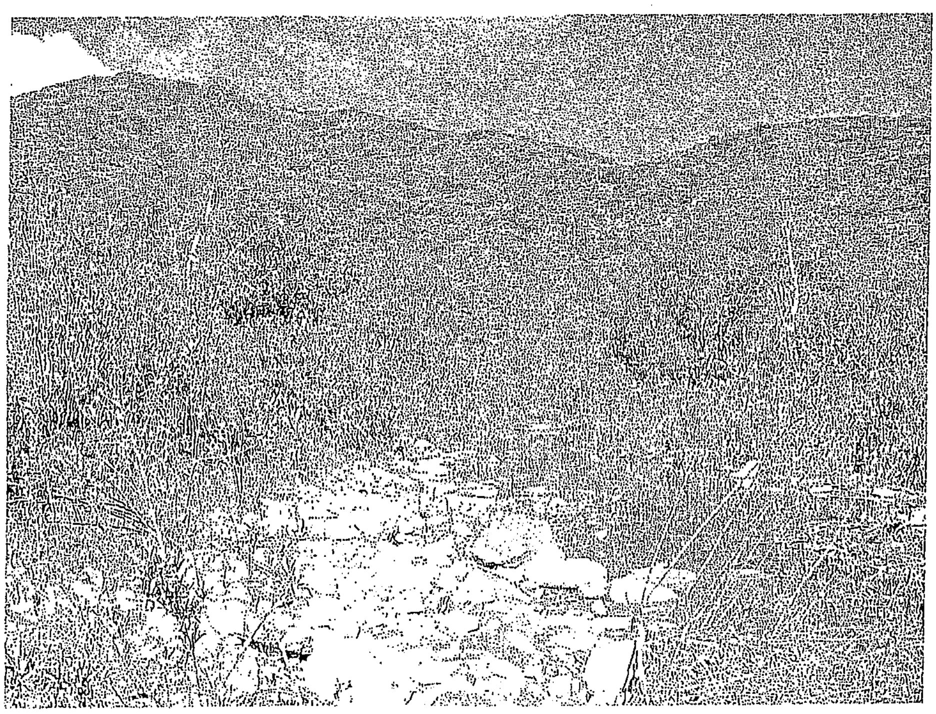


Figure 7. Site 1 on east bank in willow thicket

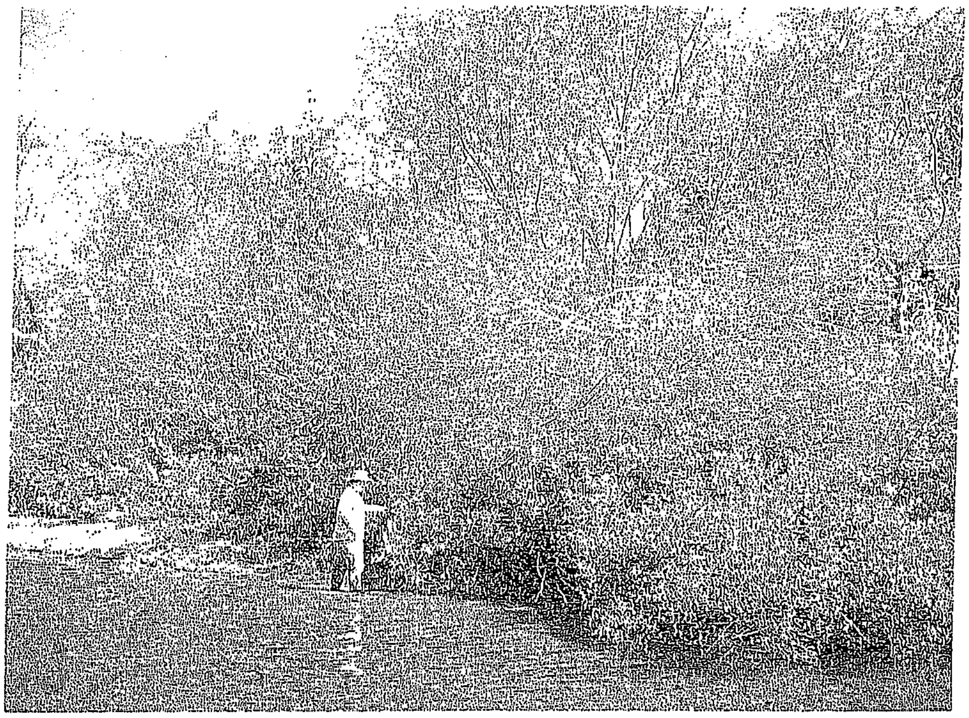


Figure 8. Site 1 soil test pit

Figure 9. Site 2 on east bank

Figure 10. Site 3 west bank in reach lined with concrete debris

Figure 11. Site 3 soil test pit

Figure 12. Site 4 west bank downstream of Site 3

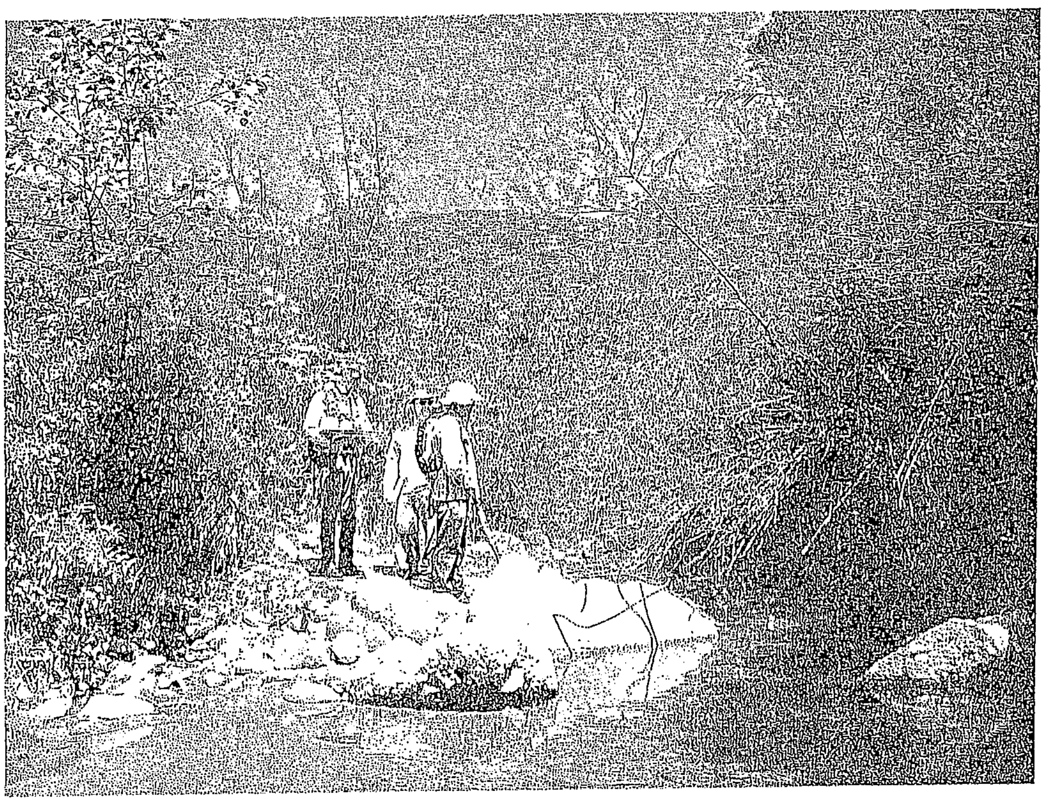


Figure 13. Site 4 Soil test pit

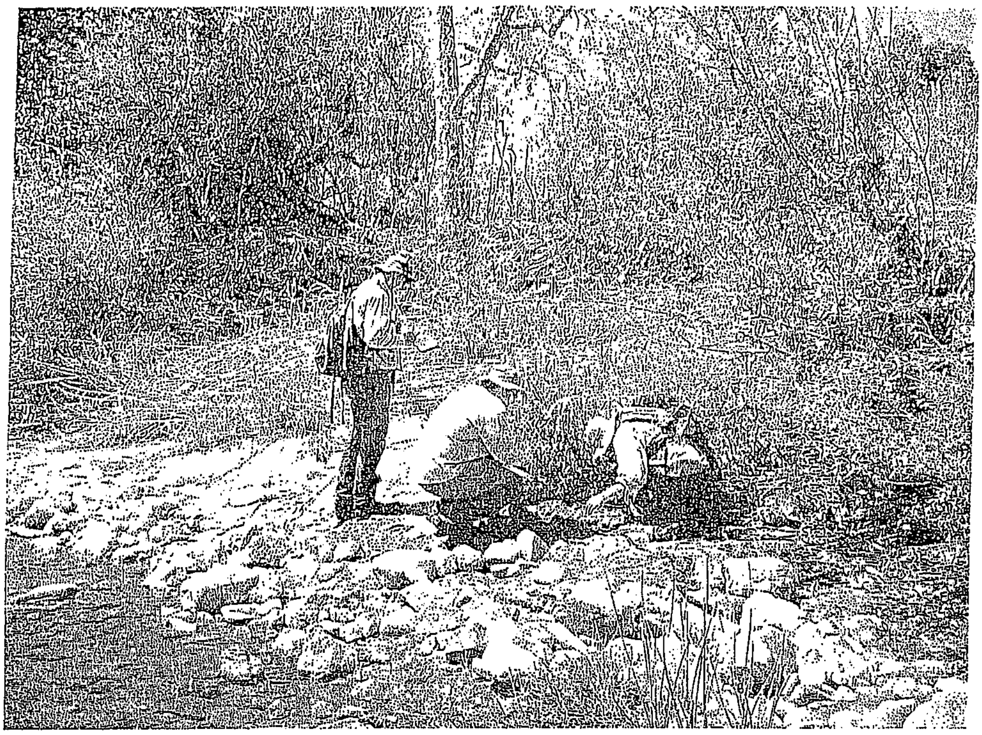


Figure 14. Veiw of Rodeo Grounds Berm road crossing looking upstream

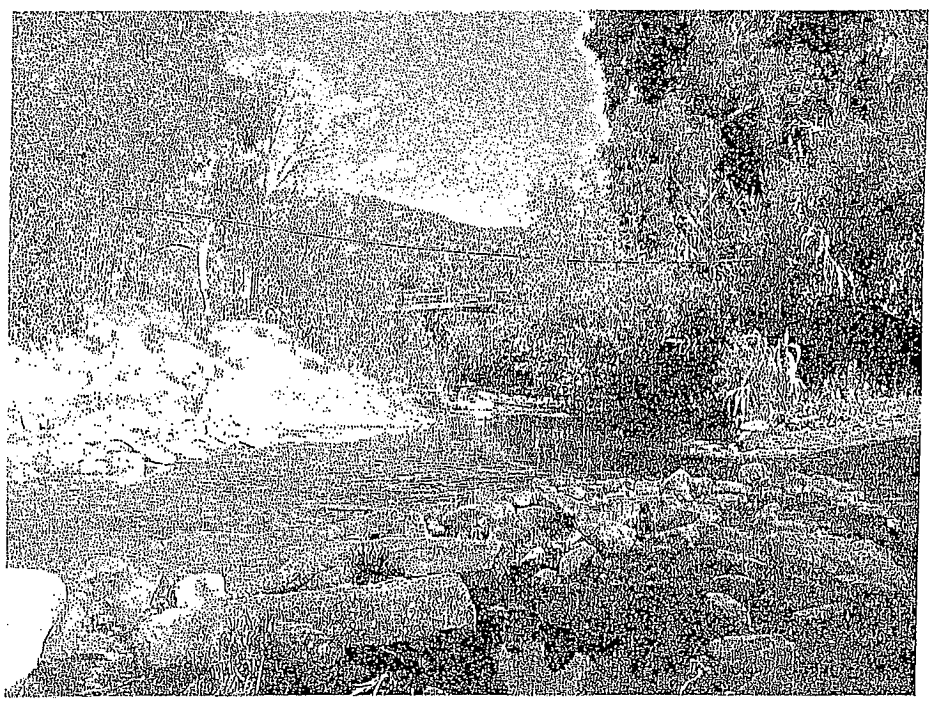
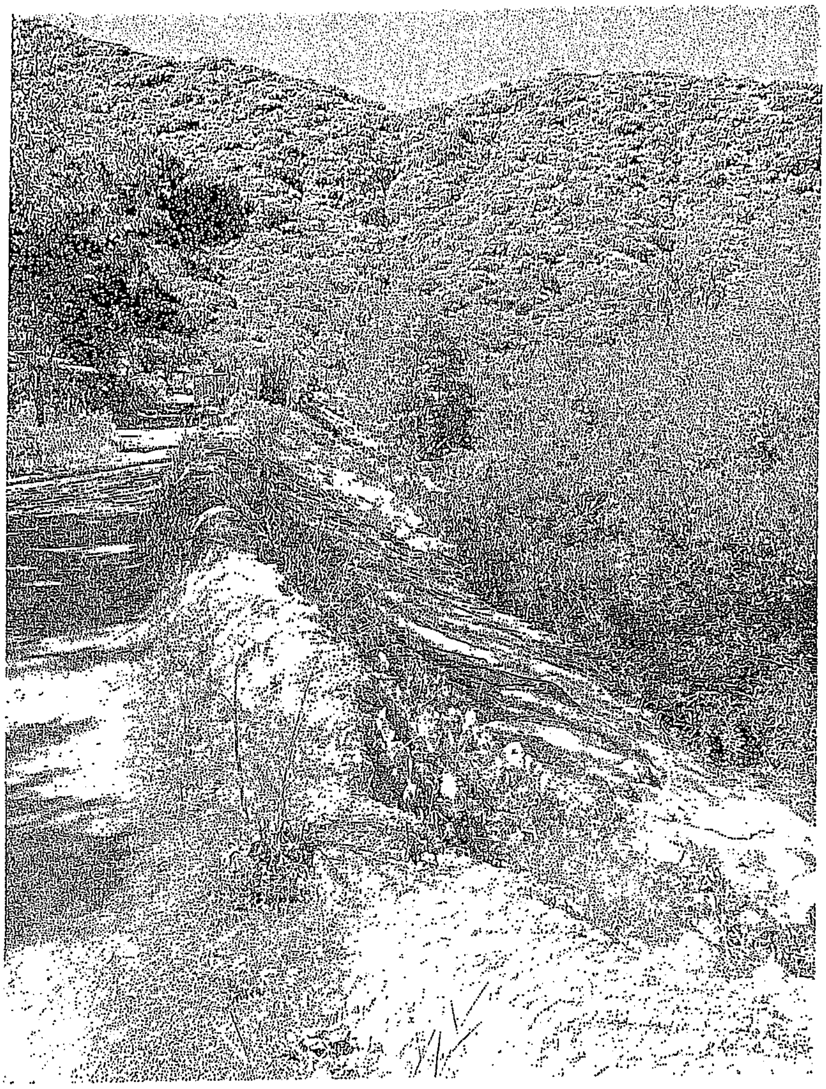
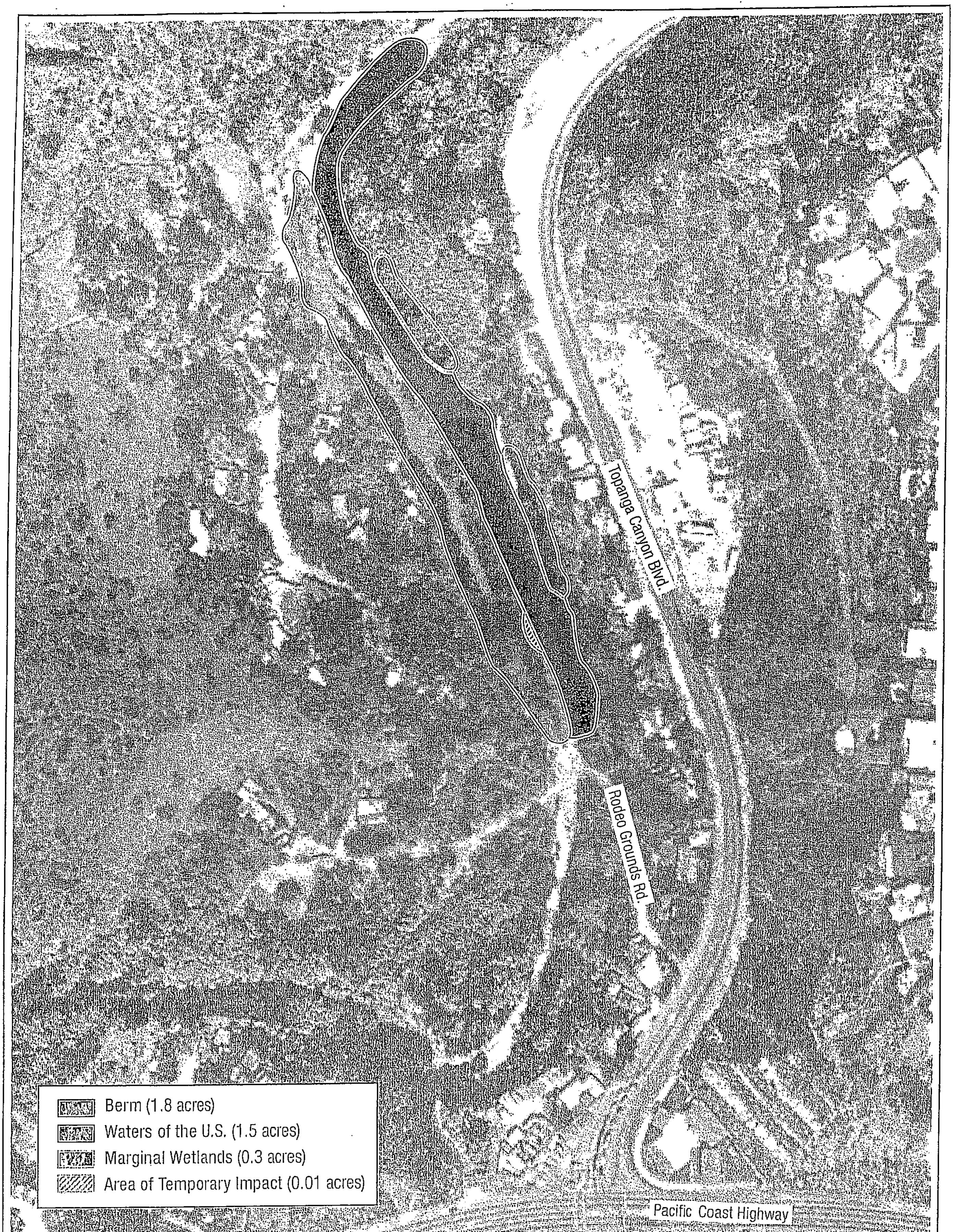


Figure 15. View of the top of the berm looking west towards slope





Source: Resource Conservation District of the Santa Monica Mountains. Aerial Photograph, I.K. Curtis, 1997.

ENVICOM CORPORATION

RODEO GROUNDS BERM REMOVAL AND RESTORATION PROJECT

Impact Areas

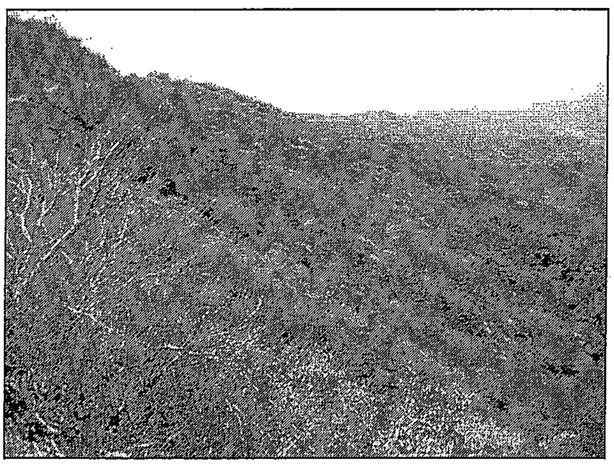
FEET 0 100 200

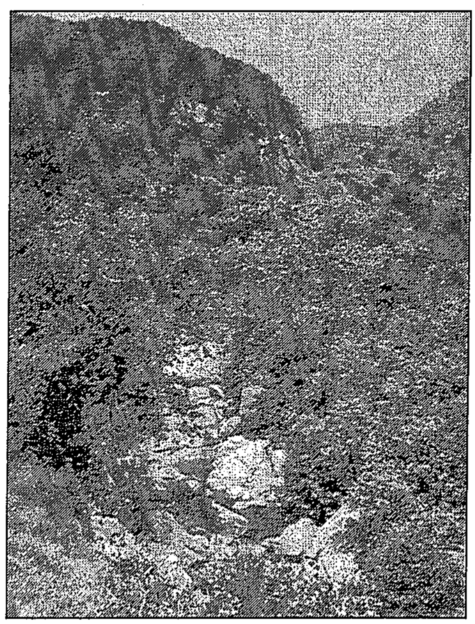
FIGURE A

science for a changing world

Riparian and Upland Bird Communities at Lower Topanga Canyon, Topanga State Park, California

2004 Annual Report





Prepared for:

California State Parks
Southern Service Center

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
WESTERN ECOLOGICAL RESEARCH CENTER

Riparian and Upland Bird Communities at Lower Topanga Canyon, Topanga State Park, California

By Barbara E. Kus, Josephine F. Falcone, and Heather Howitt

U.S. GEOLOGICAL SURVEY
WESTERN ECOLOGICAL RESEARCH CENTER

2004 Annual Report

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2006

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Cover photographs by Josephine Falcone

Recommended citation:

Kus, B. E., J. Falcone, and H. Howitt. 2006. Riparian and upland bird communities at Lower Topanga Canyon, Topanga Canyon State Park. 2004 Annual Report. Prepared for California State Parks, Southern Service Center, San Diego, CA.

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INTRODUCTION

The California Department of State Parks is conducting an inventory of resources in Lower Topanga Canyon, a recent addition to Topanga State Park in Los Angeles County, California. Information obtained during the inventory will identify the Park's resources as well as provide a baseline for future comparisons of resource conditions as State Parks implements improvements, including habitat restoration. This report summarizes the results of bird surveys conducted in 2004 within riparian and upland habitats, and represents the second year of a two-year project initiated in 2003 to inventory the Park's bird communities (Kus et al. 2003).

STUDY SITE AND METHODS

Study Site

Lower Topanga Canyon includes approximately 660 ha (1,650 acres) of land bounded to the south by the Pacific Ocean and to the north by the previous boundary of Topanga State Park (Figure 1). The site is bisected by Topanga Canyon Boulevard which runs north-south adjacent to a narrow perennial stream flowing through the canyon bottom. Vegetation along the stream consists of mixed willow riparian habitat with scattered cottonwoods (*Populus fremontii*), sycamores (*Platanus racemosa*) and oaks (*Quercus agrifolia*). The stream is bordered by steep canyon walls covered with near-pristine chaparral habitat. Lemonade berry (*Rhus integrifolia*) and white sage (*Salvia apiana*) are common among the upland plants.

Methods

Data Collection

Birds were censused using point counts at stations situated at least 250 m apart from one another (Figure 1). Twenty-two of 23 stations established in 2003 were surveyed in 2004; point "U1" (Kus et al. 2003) was not surveyed because the point location, 350 m up a scrub-covered cliff, was inaccessible in 2004. Twelve stations were located along the length of the riparian habitat at the site (designated with an "R"

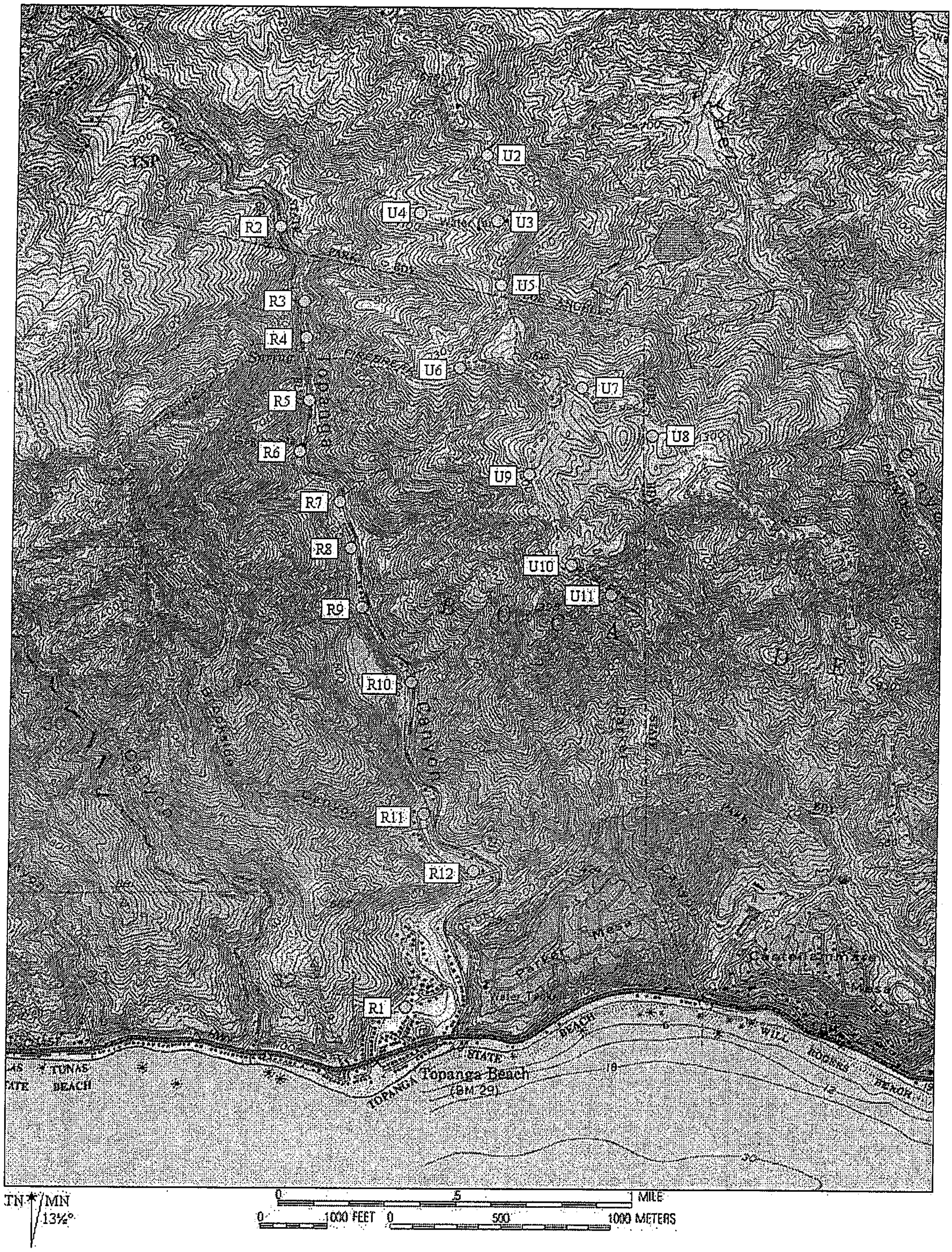


Figure 1. Locations of point count stations at Lower Topanga Canyon, 2004.

in figures and tables), while 10 were situated in upland habitat (designated with a "U"). Because of the steepness and inaccessibility of much of the terrain, upland points were concentrated in the eastern portion of the site accessible by dirt roads and trails.

Observers relocated points using GPS (Geographic Positioning System) coordinates recorded in 2003. Discrepancies were encountered for a few upland points between the coordinates and the actual point location as determined from annotated aerial photographs and field notes recorded in 2003. In these instances, new coordinates of the actual points were obtained (Appendix 1).

Counts commenced within an hour after sunrise, and continued through late morning (no later than 1100 hr). Both unlimited distance counts (Blondel et al. 1981) and fixed-radius counts (Ralph et al. 1993) were conducted to maximize the amount of information obtained at each plot, and to ensure compatibility with methods used in other bird monitoring studies, thus enabling comparison of results. Each count began immediately upon the arrival of the observer at the plot, and lasted ten minutes. Observers counted all birds detected, and recorded for each whether it occurred inside or outside of a 50-m-radius count circle centered on the observer. Birds flying overhead ("flyovers") were recorded separately. Data were recorded separately for the first three minutes, the following two minutes, and the remaining five minutes of the count, to allow for potential comparisons with data from investigators using count durations of less than ten minutes. When possible, the age and sex of birds detected were recorded. Observers did not move about the plot during the count, and no attracting devices or sounds (e.g., "pishing") were used.

Most points were surveyed four times during the study (22-23 May, and 26-27 June) by two observers skilled at identifying birds by sight and sound (Josephine Falcone and Heather Howitt). Observers divided the riparian and upland points between them on each two-day survey period, one counting one set the first day and the second set the following day. Two points (U2, U7; Figure 1) were surveyed during only the 26-27 June period because locations surveyed in May, based on GPS coordinates from 2003, were determined after consulting maps and notes not to be the actual points (see above).

Data Analysis

Data collected from the point counts allowed analysis of the Lower Topanga Canyon bird community at two scales: site-wide, and by habitat type (riparian or upland). Site-wide analyses were conducted on the combined data from all 22 points, and included frequency of occurrence of each species (percent of surveyed points at which the species was present), average species richness (number of species) per point, total abundance of birds per point, relative abundance of species (percent of all individuals represented by a particular species), and average density of species common enough to be adequately characterized by the point count method (relative abundance ≥ 5%). Abundance was calculated as the maximum number of individuals of each species detected at each point over the three surveys. Densities per point were calculated using the formula density = $n/\pi r^2$, where n = number of birds within 50-m-radius circle (using maximum number detected for each species over the three counts) and r = 50 m, and were expressed as individuals per 100 ha. Similar analyses were performed separately for the riparian and upland points, allowing comparison between the two habitat types.

RESULTS AND DISCUSSION

Species Occurrence

A total of 55 species (excluding unidentified hummingbirds and swallows; including *Selasphorus* hummingbirds and an unidentified blackbird) was observed at the point count stations in 2004 (Table 1), comparable to the 56 species (including *Selasphorus* hummingbirds) detected in 2003 (Kus et al. 2003). Nine species not seen in 2003, including American Goldfinch (*Carduelis tristis*), Lawrence's Goldfinch (*C. lawrencei*), Blue-gray Gnatcatcher (*Polioptila caerulea*), unidentified blackbird, Common Peafowl (*Pavo cristatus*), Great Horned Owl (*Bubo virginianus*), Phainopepla (*Phainopepla nitens*), Tree Swallow (*Tachycineta bicolor*), and Turkey Vulture

(*Cathartes aura*), were recorded in 2004, bringing the total list of species for the site to 65. Species seen in 2003 but not detected in 2004 included California Gull (*Larus californicus*), Western Gull (*L. occidentalis*), Costa's Hummingbird (*Calypte costae*), Downy Woodpecker (*Picoides pubescens*), Lazuli Bunting (*Passerina amoena*), unidentified parrot, Rock Pigeon (*Columba livia*), Warbling Vireo (*Vireo gilvus*), White-breasted Nuthatch (*Sitta carolinensis*), and Western Screech-Owl (*Megascops kennicottii*). Five of the 19 species (26%) seen in only one year were detected exclusively as flyovers.

As in 2003, the most common species throughout the study area included the Spotted Towhee (*Pipilo maculatus*) and Wrentit (*Chamaea fasciata*), both present at all points, California Towhee (*Pipilo crissalis*; 21 or 95% of points), Western Scrub-Jay (*Aphelocoma californica*; 20 or 91% of points), Bushtit (*Psaltriparus minimus*), Bewick's Wren (*Thyromanes bewickii*), and Lesser Goldfinch (*C. psaltria*), each seen at 18 or 82% of points, Song Sparrow (*Melospiza melodia;* 17 or 77% of points), Mourning Dove (*Zenaida macroura*) and Black-headed Grosbeak (*Pheucticus melanocephalus*), both seen at 16 or 73% of points, and Orange-crowned Warbler (*Vermivora celata*) and Anna's Hummingbird (*C. anna*), both seen at 15 or 68% of points (Table 1).

Two of the 55 species (4%; Turkey Vulture and an unidentified blackbird) occurred exclusively as flyovers and were never observed on the ground (Table 1). Other species for which the majority of sightings were as flyovers included Mallard (*Anas platyrhynchos;* 83% of 6 sightings), unidentified swallows (78% of 9 sightings), and Common Raven (*Corvus corax;* 80% of 10 sightings). Aside from these species, flyovers made up 5% of all bird detections (n = 1,773). Flyovers are of limited usefulness in assessing land conditions at the scale of the point count stations used in this study, and are excluded from further analyses unless otherwise indicated.

Seven of the species detected during point counts are sensitive species or species of conservation concern (Table 1). Yellow Warbler (*Dendroica petechia*), seen at 50% (11/22) of the points, is a California Species of Special Concern (California

Table 1. Species observed during point counts at Lower Topanga Canyon in 2004.

			Occurrence at Points					
			All Points		Riparian Points		Upland Points	
Species Code	Common Name	Taxonomic Name	#	%	#	%	#	%
ALHU	Allen's Hummingbird	*Selasphorus sasin*	4	18	4	33	0	0
AMCR	American Crow	*Corvus brachyrhynchos*	4	18	1	8	3	30
AMGO	American Goldfinch	*Carduelis tristis*	2	9	2	17	0	0
AMRO	American Robin	*Turdus migratorius*	2	9	2	17	0	0
ANHU	Anna's Hummingbird	*Calypte anna*	15	68	5	42	10	100
ATFL	Ash-throated Flycatcher	*Myiarchus cinerascens*	13	59	8	67	5	50
BCHU	Black-chinned Hummingbird	*Archilochus alexandri*	6	27	5	42	1	10
BEWR	Bewick's Wren	*Thyromanes bewickii*	18	82	8	67	10	100
BGGN	Blue-gray Gnatcatcher	*Polioptila caerulea*	1	5	0	0	1	10
BHCO	Brown-headed Cowbird	*Molothrus ater*	5	23	5	42	0	0
BHGR[c]	Black-headed Grosbeak	*Pheucticus melanocephalus*	16	73	9	75	7	70
BLAC[a]	Unidentified Blackbird		1	5	0	0	1	10
BLPH	Black Phoebe	*Sayornis nigricans*	7	32	7	58	0	0
BTPI	Band-tailed Pigeon	*Patagioenas fasciata*	3	14	2	17	1	10
BUOR	Bullock's Oriole	*Icterus bullockii*	2	9	2	17	0	0
BUSH	Bushtit	*Psaltriparus minimus*	18	82	9	75	9	90
CALT	California Towhee	*Pipilo crissalis*	21	95	12	100	9	90
CANW	Canyon Wren	*Catherpes mexicanus*	13	59	8	67	5	50
CAQU	California Quail	*Callipepla californica*	5	23	0	0	5	50
CATH	California Thrasher	*Toxostoma redivivum*	10	45	1	8	9	90
CLSW	Cliff Swallow	*Petrochelidon pyrrhonota*	7	32	0	0	7	70
COPE	Common Peafowl	*Pavo cristatus*	1	5	0	0	1	10
CORA	Common Raven	*Corvus corax*	7	32	3	25	4	40
COYE[c]	Common Yellowthroat	*Geothlypis trichas*	7	32	5	42	2	20
GHOW	Great Horned Owl	*Bubo virginianus*	1	5	1	8	0	0
HOFI	House Finch	*Carpodacus mexicanus*	10	45	2	17	8	80
HOOR	Hooded Oriole	*Icterus cucullatus*	1	5	1	8	0	0

Table 1 (continued). Species observed during point counts at Lower Topanga Canyon, 2004.

Species Code	Common Name	Taxonomic Name	Occurrence at Points: All Points #	All Points %	Riparian Points #	Riparian Points %	Upland Points #	Upland Points %
HUMM	Hummingbird spp.		14	64	9	75	5	50
HUVI	Hutton's Vireo	*Vireo huttoni*	7	32	7	58	0	0
LAGO	Lawrence's Goldfinch	*Carduelis lawrencei*	2	9	2	17	0	0
LEGO	Lesser Goldfinch	*Carduelis psaltria*	18	82	10	83	8	80
MALL	Mallard	*Anas platyrhynchos*	4	18	4	33	0	0
MODO	Mourning Dove	*Zenaida macroura*	16	73	9	75	7	70
NOFL	Northern Flicker	*Colaptes auratus*	8	36	5	42	3	30
NOMO	Northern Mockingbird	*Mimus polyglottos*	2	9	1	8	1	10
NRWS	Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	14	64	7	58	7	70
NUWO	Nuttall's Woodpecker	*Picoides nuttallii*	12	55	7	58	5	50
OATI	Oak Titmouse	*Baeolophus inornatus*	10	45	3	25	7	70
OCWA	Orange-crowned Warbler	*Vermivora celata*	15	68	10	83	5	50
OSFL	Olive-sided Flycatcher	*Contopus cooperi*	10	45	10	83	0	0
PHAI	Phainopepla	*Phainopepla nitens*	1	5	0	0	1	10
PSFL	Pacific-slope Flycatcher	*Empidonax difficilis*	13	59	12	100	1	10
PUFI	Purple Finch	*Carpodacus purpureus*	5	23	5	42	0	0
RTHA	Red-tailed Hawk	*Buteo jamaicensis*	7	32	6	50	1	10
SELA	*Selasphorus* hummingbird spp.	*Selasphorus* spp.	4	18	3	25	1	10
SOSP[c]	Song Sparrow	*Melospiza melodia*	17	77	11	92	6	60
SPTO	Spotted Towhee	*Pipilo maculatus*	22	100	12	100	10	100
SWAL	Unidentified swallow		7	32	5	42	2	20
TRES[c]	Tree Swallow	*Tachycineta bicolor*	2	9	2	17	0	0
TUVU[a]	Turkey Vulture	*Cathartes aura*	1	5	0	0	1	10
VGSW	Violet-green Swallow	*Tachycineta thalassina*	5	23	5	42	0	0
WESJ	Western Scrub-Jay	*Aphelocoma californica*	20	91	10	83	10	100
WEWP	Western Wood-Pewee	*Contopus sordidulus*	13	59	10	83	3	30

Table 1(continued). Species observed during point counts at Lower Topanga Canyon, 2004.

Species Code	Common Name	Taxonomic Name	Occurrence at Points: All Points #	%	Riparian Points #	%	Upland Points #	%
WIWA[c]	Wilson's Warbler	*Wilsonia pusilla*	5	23	3	25	2	20
WREN[d]	Wrentit	*Chamaea fasciata*	22	100	12	100	10	100
WTSW	White-throated Swift	*Aeronautes saxatalis*	6	27	4	33	2	20
YWAR[bc]	Yellow Warbler	*Dendroica petechia*	11	50	10	83	1	10

[a]Species seen only as flyover.
[b]California Species of Special Concern (Calif. Dept. of Fish and Game 1992).
[c]California Partners in Flight Riparian Conservation Focal Species (RHJV 2000).
[d]California Partners in Flight Coastal Scrub and Chaparral Conservation Focal Species (CalPIF 2003).

Department of Fish and Game 1992). Six species are identified as focal species of the California Partners in Flight riparian bird conservation plan (RHJV 2000); in addition to Yellow Warbler, these include Black-headed Grosbeak, Common Yellowthroat (*Geothlypis trichas*), Song Sparrow, Tree Swallow, and Wilson's Warbler (*Wilsonia pusilla*). One species, the Wrentit, is a focal species in the California Partners in Flight coastal scrub and chaparral bird conservation plan (CalPIF 2003). With the exception of Tree Swallow, which was not detected in 2003, and Wrentit, which occurred at all points in both years, sensitive species were more widespread in 2004 than in 2003, occurring at from 1.3-5.8 times more points in 2004.

Forty-eight of the 55 total species were detected at the riparian points, while 40 occurred at the upland points (Table 1). Fifteen species were seen at riparian points but not upland points, while seven (including two species seen only as flyovers) were seen at upland points but not at riparian stations. Among the most common species at both riparian and upland points were Spotted Towhee and Wrentit, both present at all points, as well as Bushtit, California Towhee, Lesser Goldfinch, Mourning Dove, and Western Scrub-Jay. Other common riparian species included Pacific-slope Flycatcher (*Empidonax difficilis*), which occurred at all 12 riparian points, Song Sparrow, detected at 11 of the 12 points, and Orange-crowned Warbler, Olive-sided Flycatcher (*Contopus cooperi*), Western Wood-Pewee (*C. sordidulus*), and Yellow Warbler, each present at 10 of the 12 riparian points. Additional common species in the uplands included Bewick's Wren and Anna's Hummingbird, present at all 10 upland points, and California Thrasher (*Toxostoma redivivum*) and House Finch (*Carpodacus mexicanus*), detected at nine and eight upland points, respectively.

Species Richness

Species richness, or the number of species detected per point, varied according to the size of the area being censused, as well as across habitats (Table 2). Overall, species richness averaged 17 ± 4 species per point for birds detected within the 50-m radius count circle, and 20 ± 4 for all birds detected from the point (excluding flyovers). Both of these values are higher than the corresponding values for 2003, when an average of 11 ± 4 species were detected within 50 m of points, and 16 ± 4 species were counted over all distances (Kus et al. 2003). In 2004, 85 ± 11% of the species detected at a point occurred within 50 m of the point, higher than the 66 ± 16% of species detected within 50 m of points in 2003.

Table 2. Number of species detected per point, by count distance, at Lower Topanga Canyon in 2004.

	Number of Species[a]	
Point[b]	< 50 m	All Distances
R1	18	19
R2	15	24
R3	23	24
R4	18	19
R5	14	19
R6	22	25
R7	15	17
R8	22	22
R9	18	19
R10	23	24
R11	22	26
R12	22	27
U2	11	13
U3	14	18
U4	16	19
U5	22	23
U6	14	18
U7	10	13
U8	14	19
U9	17	18
U10	16	17
U11	13	21

[a]Species seen only as flyovers excluded.
[b]R denotes riparian point, U denotes upland point.

As in 2003, species richness of the riparian points in 2004 was slightly higher than that of the upland points at both count distances. At riparian points, richness averaged 19 ± 3 species and 22 ± 3 species per point for birds within 50 m and at all distances, respectively; corresponding values for the upland points were 15 ± 2 and 18 ± 3 species per point.

Species Abundance

Like species richness, bird abundance varied across points as well as count area (Figure 2). Total bird abundance over all 22 points averaged 35.5 ± 8.6 individuals per point for birds seen within 50 m, and 45.8 ± 9.8 for birds seen at all distances. Both measures of abundance in 2004 were roughly twice those documented in 2003, when abundance within 50 m of points averaged 16.5 ± 6.3 individuals per point, and total abundance averaged 27.6 ± 7.7 individuals per point (Kus et al. 2003). As in 2003, riparian and upland points in 2004 were similar with regard to average bird abundance both within 50 m (riparian: 35.8 ± 6.6; upland: 35.1 ± 10.8), and at all distances (riparian: 42.8 ± 6.8; upland: 49.4 ± 11.9).

Among species, those that were the most common and widespread across points were also the most abundant. Overall, the most abundant species (those making up ≥ approximately 5% of all individuals observed) included Bushtit (7.9% of total individuals), California Towhee (4.8%), Spotted Towhee (9.3%), and Wrentit (9.5%; Figure 3). In 2003, Bewick's Wren, Western Scrub-Jay, and Song Sparrow also comprised 5% or more of all birds detected; however, abundance of these species in 2004 was relatively lower in part because of the large number of Northern Rough-winged Swallows observed foraging in the habitat at point count locations. This species, which was present but not abundant in 2003, made up 7.2% of all birds detected in 2004, and was second only to Wrentits in relative abundance (Figure 3).

Of the species most abundant overall, Bushtit, Spotted Towhee, and Wrentit were among the most abundant species at both riparian and upland points (Figures 4, 5). Also among the most abundant species at riparian points were Song Sparrow (6.8% of individuals) and California Towhee (5.5%), which were not abundant at upland points. In contrast, Bewick's Wren (6.1% of individuals) and Northern Rough-winged Swallow (12.6%) were among the most abundant species at upland points, but occurred in comparatively low numbers at riparian points.

Figure 2. Total species abundance, by point and count distance, of birds at Lower Topanga Canyon in 2004.

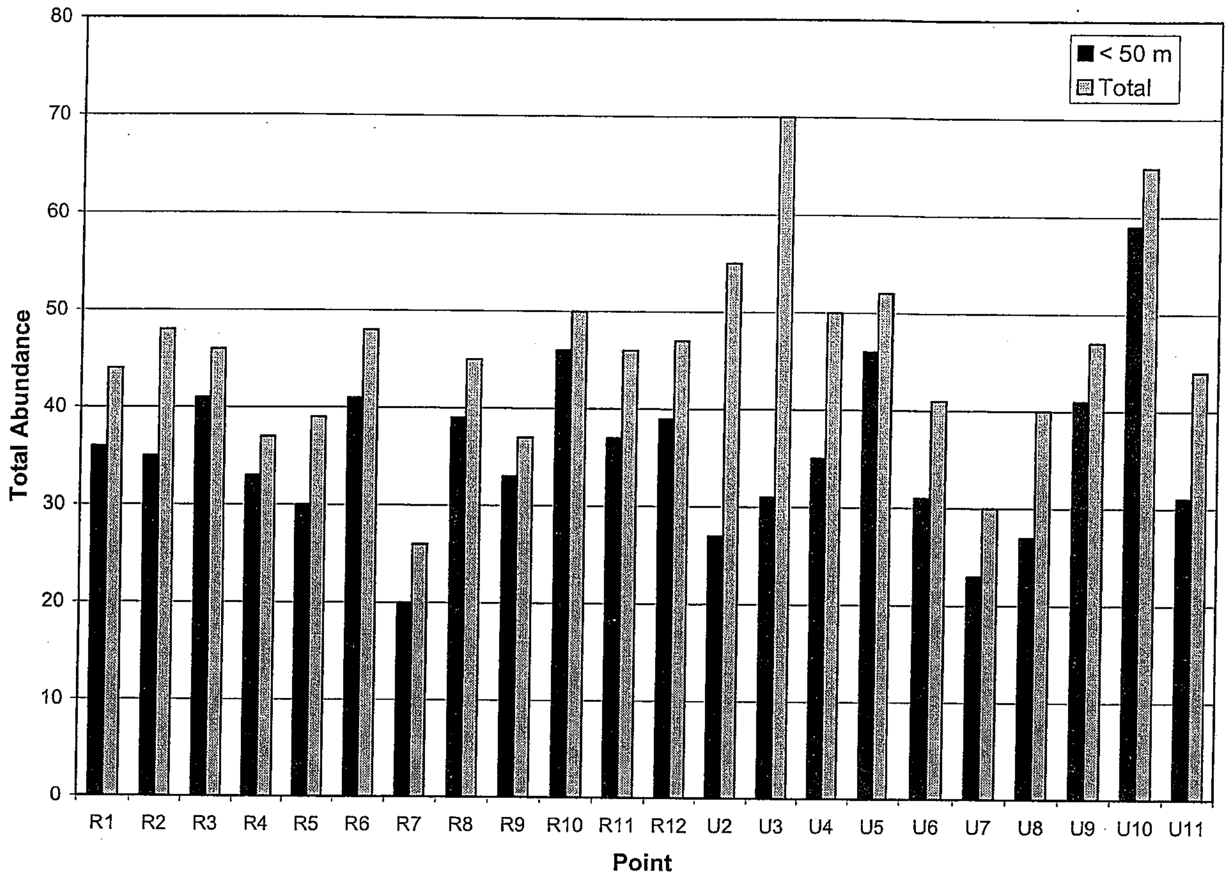


Figure 5. Relative abundance of species at Lower Topanga Canyon in 2004: upland points.

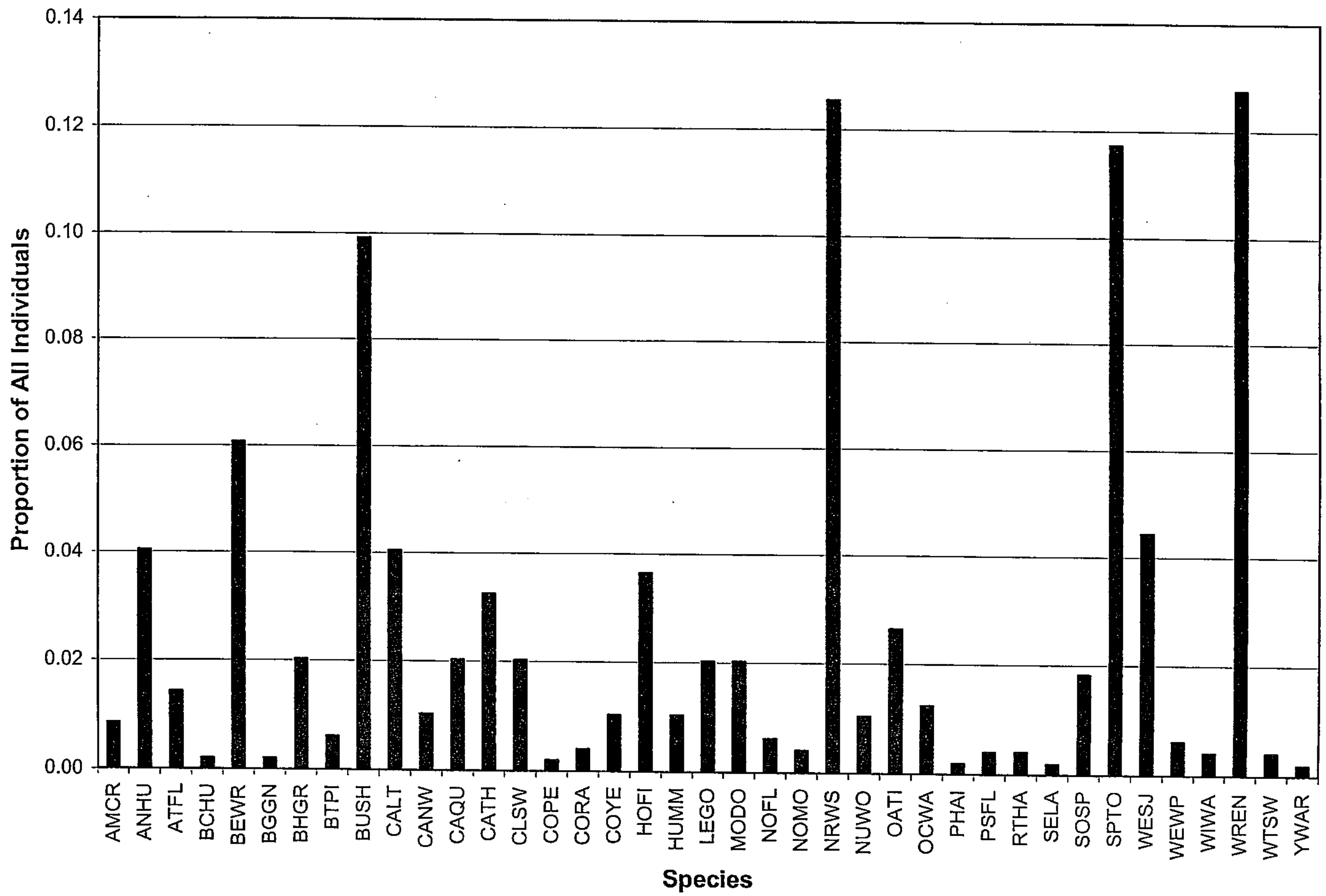


Figure 4. Relative abundance of species at Lower Topanga Canyon in 2004: riparian points.

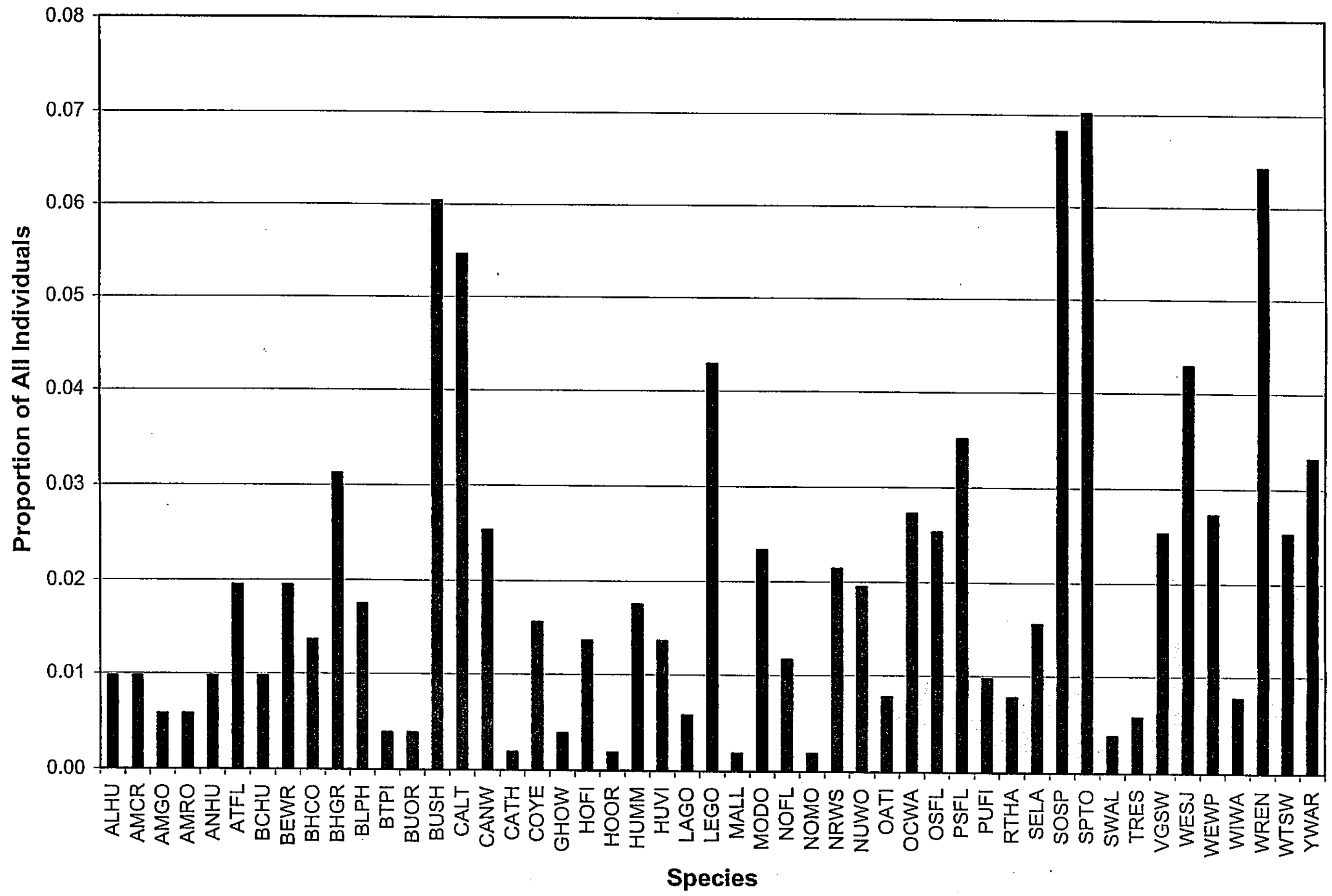
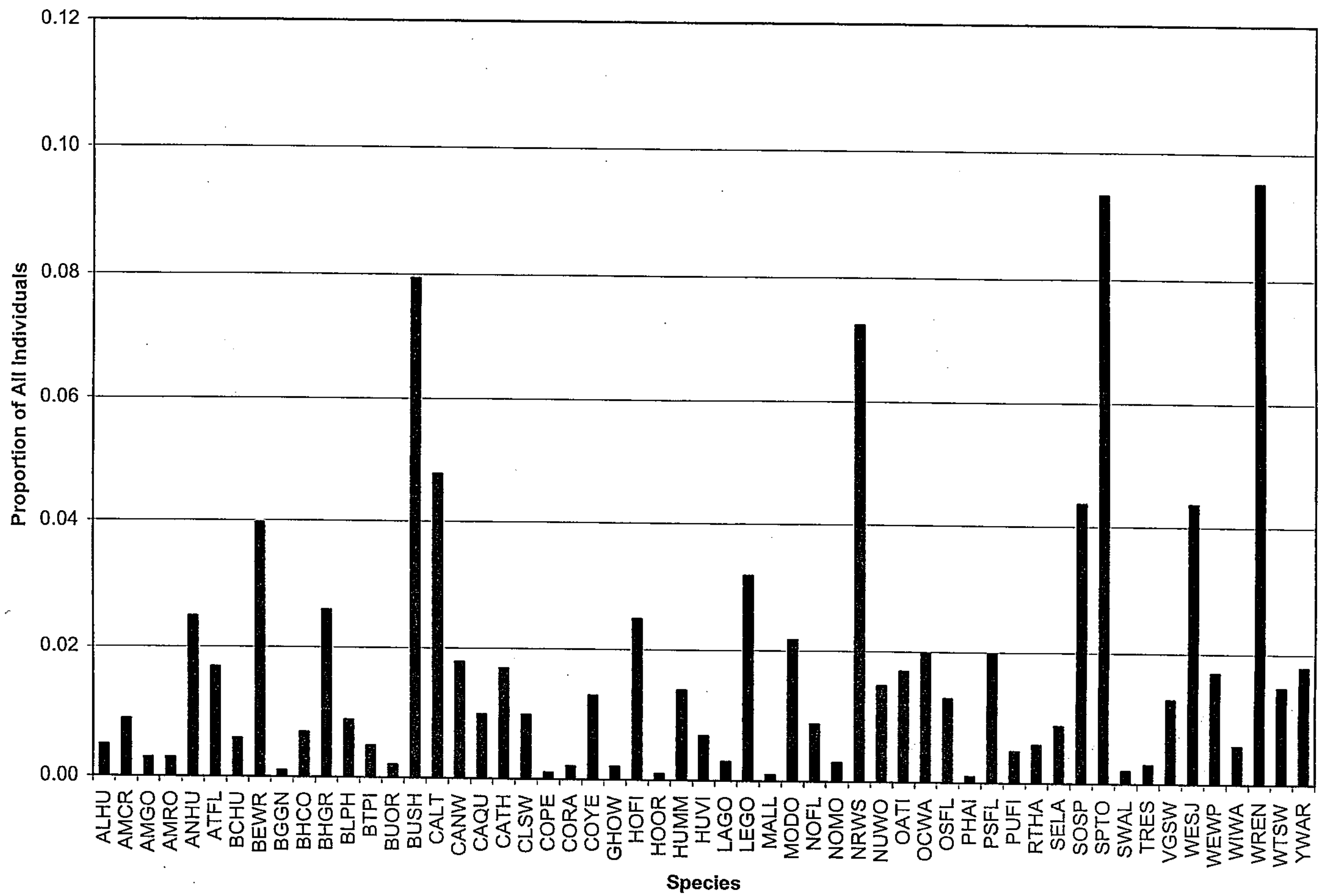


Figure 3. Relative abundance of species at Lower Topanga Canyon in 2004: all points.



Density

Density of the most abundant species throughout the study area ranged from 146 ± 177 individuals per 100 ha (Northern Rough-winged Swallow) to 457 ± 459 individuals per 100 ha (Bushtit; Table 3). Of the species that were abundant in both riparian and upland habitats, all achieved higher densities in upland areas. Wrentits, which had the third highest relative abundance at riparian points (Figure 4), had the lowest density there, indicating that a large fraction of the Wrentits observed at riparian points were outside of the 50-m circle used to calculate bird densities. Similarly, Northern Rough-winged Swallows, which were the second most abundant species at upland points, exhibited the lowest density there, indicating that most individuals were farther than 50 m from points.

Table 3. Average density (± s.d.) of most abundant species, by habitat, at Lower Topanga Canyon in 2004.

All Points			Riparian Points			Upland Points		
	# per 100 ha			# per 100 ha			# per 100 ha	
Species	Average	s.d.	Species	Average	s.d.	Species	Average	s.d.
BUSH	457	459	BUSH	329	279	BEWR	369	297
CALT	260	144	CALT	276	91	BUSH	611	591
NRWS	146	177	SOSP	340	198	NRWS	153	223
SPTO	411	188	SPTO	318	127	SPTO	522	194
WREN	307	218	WREN	159	96	WREN	484	188

CONCLUSIONS

Data collected in 2004 served to expand the inventory of birds at Topanga Canyon State Park, and captured natural variability in the Park's bird community that will be useful in future examinations of bird response to changes in habitat condition and management. First, the counts revealed that while overall bird species richness was virtually the same in 2003 and 2004, community composition differed between the two years. Ten species seen in 2003 were replaced by nine species seen for the first time in 2004, suggesting that approximately 15-20% of species at the site may differ between years. Second, the 2004 counts revealed substantial increases in bird abundance relative to 2003. These increases were observed in both riparian and upland habitats, and across species. Despite changes in overall abundance between years, species remained generally stable with regard to relative abundance, although a few differences were noted. Wrentits and Spotted Towhees continued to be the most abundant and widespread species at the count stations, but were joined in 2004 by Bushtits and California Towhees which increased to become similarly widespread and abundant. Song sparrows continued to dominate riparian habitats, but Pacific-slope Flycatchers, which were the fifth most abundant species in 2003, were outnumbered in 2004 by large numbers of California Towhees, Bushtits, and Lesser Goldfinches, and comprised less than 5% of the birds at riparian points. Bewicks' Wrens maintained high densities at upland points, but California Thrasher numbers were comparatively lower than in 2003, with Northern Rough-winged Swallows becoming the second most abundant species at these points. Pacific-slope Flycatchers and California Thrashers were identified in 2003 as potential focal monitoring species in riparian and upland habitats (along with Song Sparrows and Bewick's Wrens) because of their narrow association with these respective habitats. Data from 2004 combined with future data will provide a more complete understanding of spatial and temporal variability in the Park's bird community and permit determination of appropriate species and/or metrics for monitoring and detecting change.

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Appendix 1. GPS coordinates in decimal degrees of point count stations, Lower Topanga Canyon.

Point[a]	Latitude N	Longitude W
R1	34.04116	-118.58159
R2	34.07324	-118.58833
R3	34.07020	-118.58711
R4	34.06873	-118.58697
R5	34.06610	-118.58677
R6	34.06400	-118.58719
R7	34.06199	-118.58518
R8	34.06004	-118.58460
R9	34.05764	-118.58402
R10	34.05454	-118.58157
R11	34.04910	-118.58085
R12	34.04675	-118.57841
U2	34.07626	-118.57823
U3	34.07353	-118.57760
U4	34.07383	-118.58142
U5	34.07091	-118.57741
U6	34.06748	-118.57936
U7	34.06669	-118.57332
U8	34.06475	-118.56982
U9	34.06313	-118.57585
U10	34.05941	-118.57372
U11	34.05821	-118.57173

[a]R denotes riparian point, U denotes upland point.

Appendix 2. Maximum abundance of species observed during point counts, by point and count distance, Lower Topanga Canyon, 2004.

Species Code	R1		R2		R3		R4		R5		R6		R7		R8		R9		R10		R11		R12	
	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total
ALHU			1	1	2	2	1	1											1	1			1	1
AMCR	2	5																						
AMGO			2	2																			1	1
AMRO			0	1							2	2												
ANHU	1	1					1	1							1	1							1	1
ATFL	1	1			1	1					0	1	1	1	1	2	1	1			2	2	1	1
BCHU					1	1	1	1			1	1					1	1			1	1		
BEWR	1	1	0	1			0	1	0	1			1	2	1	2	1	1			0	1		
BGGN																								
BHCO	1	1	0	1			2	2													1	1	2	2
BHGR			3	3	1	1			0	1			1	1	2	2	3	3	2	2	2	2	0	1
BLPH	2	2			1	1					1	1			2	2			1	1	1	1	1	1
BTPI															2	2								
BUOR			1	1																			1	1
BUSH	7	7	3	3	4	4			5	5	1	1			3	3			4	4	2	2	2	2
CALT	2	2	2	2	2	2	1	1	2	3	2	2	2	2	2	3	3	3	4	4	2	2	2	2
CANW			0	1	3	3	1	1	2	2	0	1	0	1					3	3	0	1		
CAQU																								
CATH																							0	1
CLSW																								
COPE																								
CORA																								
COYE	2	2									1	1	1	1	2	3			1	1				
GHOW																	2	2						
HOFI	3	4																					3	3
HOOR																							0	1

Maximum Abundance[a]

Appendix 2 (continued). Maximum abundance of species observed during point counts, by point and count distance, Lower Topanga Canyon, 2004.

Species Code	R1 <50m	R1 Total	R2 <50m	R2 Total	R3 <50m	R3 Total	R4 <50m	R4 Total	R5 <50m	R5 Total	R6 <50m	R6 Total	R7 <50m	R7 Total	R8 <50m	R8 Total	R9 <50m	R9 Total	R10 <50m	R10 Total	R11 <50m	R11 Total	R12 <50m	R12 Total
HUMM	1	1	0	1	1	1	1	1	1	1					1	1	1	1					2	2
HUVI			0	1	1	1			0	1	1	1					1	1	1	1	1	1		
LAGO																					1	1	2	2
LEGO	2	2			2	2	1	1	4	5					2	2			4	4	4	4	2	2
MALL							1	1																
MODO	1	1	2	2							1	1	1	1	3	3	1	1	1	1	1	1	0	1
NOFL	0	1	1	1							1	1	1	1					2	2				
NOMO	1	1																						
NRWS					1	1	2	2	2	2	2	2	2	2					2	2				
NUWO											2	2	1	1	1	1	2	2	1	1	2	2	1	1
OATI			0	1	1	1					2	2												
OCWA			0	1	1	1	1	1	0	1	2	2			1	1	0	1	3	3	2	2	1	1
OSFL	2	2	2	2	2	2			0	1	1	1			1	1	1	1	1	1	1	1	1	1
PHAI																								
PSFL	1	2	0	1	1	1	1	2	1	1	2	2	1	1	2	2	1	1	1	1	2	2	2	2
PUFI			0	1	1	1													1	1	1	1	0	1
RTHA									1	1	0	1	0	1	1	1								
SELA			4	4	1	1																	3	3
SOSP	3	4	2	2			4	5	2	2	3	4	2	2	1	1	6	6	4	4	3	3	2	2
SPTO	2	3	3	3	3	3	2	2	3	4	2	4	1	2	5	5	3	3	2	2	2	2	2	3
SWAL									1	1			1	1										
TRES																			2	2	1	1		
TUVU																								
VGSW					3	3	2	2	2	2	6	6												
WESJ			4	4	2	2			1	1	4	4	1	2	1	2	1	1	3	3	0	1	2	2
WEWP			1	1	1	1	1	1			1	1	1	1	1	1	2	2	1	1	2	3	2	2

Column group heading: Maximum Abundance[a]

Appendix 2 (continued). Maximum abundance of species observed during point counts, by point and count distance, Lower Topanga Canyon, 2004.

Species Code	Maximum Abundance[a]																							
	R1		R2		R3		R4		R5		R6		R7		R8		R9		R10		R11		R12	
	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total
WIWA					1	1			1	1											2	2		
WREN	1	1	2	4	2	2	1	2	1	2	2	3	2	3	2	3	1	4	0	3	0	3	1	3
WTSW					0	5	8	8																
YWAR			2	3	2	2	1	1	1	1	1	1			1	1	2	2	1	2	1	3	1	1
TOTAL	36	44	35	48	41	46	33	37	30	39	41	48	20	26	39	45	33	37	46	50	37	46	39	47

[a]Excluding flyovers.

Appendix 2 (continued). Maximum abundance of species observed during point counts, by point and count distance, Lower Topanga Canyon, 2004.

Species Code	Maximum Abundance[a]																					
	U2		U3		U4		U5		U6		U7		U8		U9		U10		U11		TOTAL	
	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total
ALHU																					6	6
AMCR	0	2	0	1							0	1									2	9
AMGO																					3	3
AMRO																					2	3
ANHU	1	1	4	4	2	2	2	2	3	3	1	1	3	3	2	2	1	1	1	1	24	24
ATFL			0	1	2	2	1	1							1	2			0	1	12	17
BCHU													1	1							6	6
BEWR	2	2	1	1	2	2	2	2	3	4	1	1	2	2	4	4	9	9	3	3	33	40
BGGN													1	1							1	1
BHCO																					6	7
BHGR					0	1	1	1	1	1			1	1	2	2	2	2	1	2	22	26
BLPH																					9	9
BTPI							0	3													2	5
BUOR																					2	2
BUSH	8	8	3	3	6	6	10	10	3	3	3	3	1	1			14	14	0	1	79	80
CALT	1	1			1	1	2	2	1	1	5	5	2	3	1	1	4	4	2	2	45	48
CANW							1	1	0	1					0	1	1	1	0	1	11	18
CAQU	3	3			0	1	3	3							1	1			2	2	9	10
CATH			3	3	2	3	1	1	3	3	0	1	1	1	1	2	1	1	1	1	13	17
CLSW	1	1	2	2			1	1					0	1	4	4	1	1			9	10
COPE									0	1											0	1
CORA													0	1					0	1	0	2
COYE																	4	4	1	1	12	13
GHOW																					2	2
HOFI			3	3			2	2	1	1	1	1	3	4	2	2	3	3	2	2	23	25
HOOR																					0	1

Appendix 2 (continued). Maximum abundance of species observed during point counts, by point and count distance, Lower Topanga Canyon, 2004.

Species Code	U2 <50m	U2 Total	U3 <50m	U3 Total	U4 <50m	U4 Total	U5 <50m	U5 Total	U6 <50m	U6 Total	U7 <50m	U7 Total	U8 <50m	U8 Total	U9 <50m	U9 Total	U10 <50m	U10 Total	U11 <50m	U11 Total	TOTAL <50m	TOTAL Total
HUMM					1	1							2	2	1	1			1	1	13	14
HUVI																					5	7
LAGO																					3	3
LEGO			1	1	2	2	1	2	0	1	0	1					1	1	2	2	28	32
MALL																					1	1
MODO	0	1	0	2			1	1	1	2	1	1	0	1	2	2					16	22
NOFL			1	1					1	1									0	1	7	9
NOMO																			1	2	2	3
NRWS	5	25	2	32											2	2	3	3			23	73
NUWO					0	1			0	1	1	1	1	1	1	1					13	15
OATI	2	2			4	4	2	2	2	2			0	1	1	1			0	1	14	17
OCWA					1	1	1	1					0	1	2	2			0	1	15	20
OSFL																					12	13
PHAI							1	1													1	1
PSFL					1	2															16	20
PUFI																					3	5
RTHA	2	2																			4	6
SELA									1	1											9	9
SOSP			1	1	1	1	1	1					1	1			4	4	0	1	40	44
SPTO	1	2	4	5	3	8	3	5	5	5	4	7	4	5	6	7	6	8	5	6	71	94
SWAL																					2	2
TRES																					3	3
TUVU																					0	0
VGSW																					13	13
WESJ	0	1	0	1	3	3	1	1	2	2	2	2	1	2	3	3	0	2	4	5	35	44
WEWP			1	1	1	1	1	1													16	17

Maximum Abundance[a]

Appendix 2 (continued). Maximum abundance of species observed during point counts, by point and count distance, Lower Topanga Canyon, 2004.

	Maximum Abundance[a]																					
	U2		U3		U4		U5		U6		U7		U8		U9		U10		U11		TOTAL	
Species Code	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total	<50m	Total
WIWA			1	1	1	1															6	6
WREN	1	4	4	7	2	7	6	6	4	8	4	5	3	7	5	7	4	6	5	6	53	96
WTSW							2	2													10	15
YWAR																	1	1			14	18
TOTAL	27	55	31	70	35	50	46	52	31	41	23	30	27	40	41	47	59	65	31	44	781	1007

[a]Excluding flyovers.

APPENDIX D
Cultural Resources Reports

Topanga State Park

Archaeological Test Trenching For Rodeo Grounds Berm Removal Project

October 4, 2005

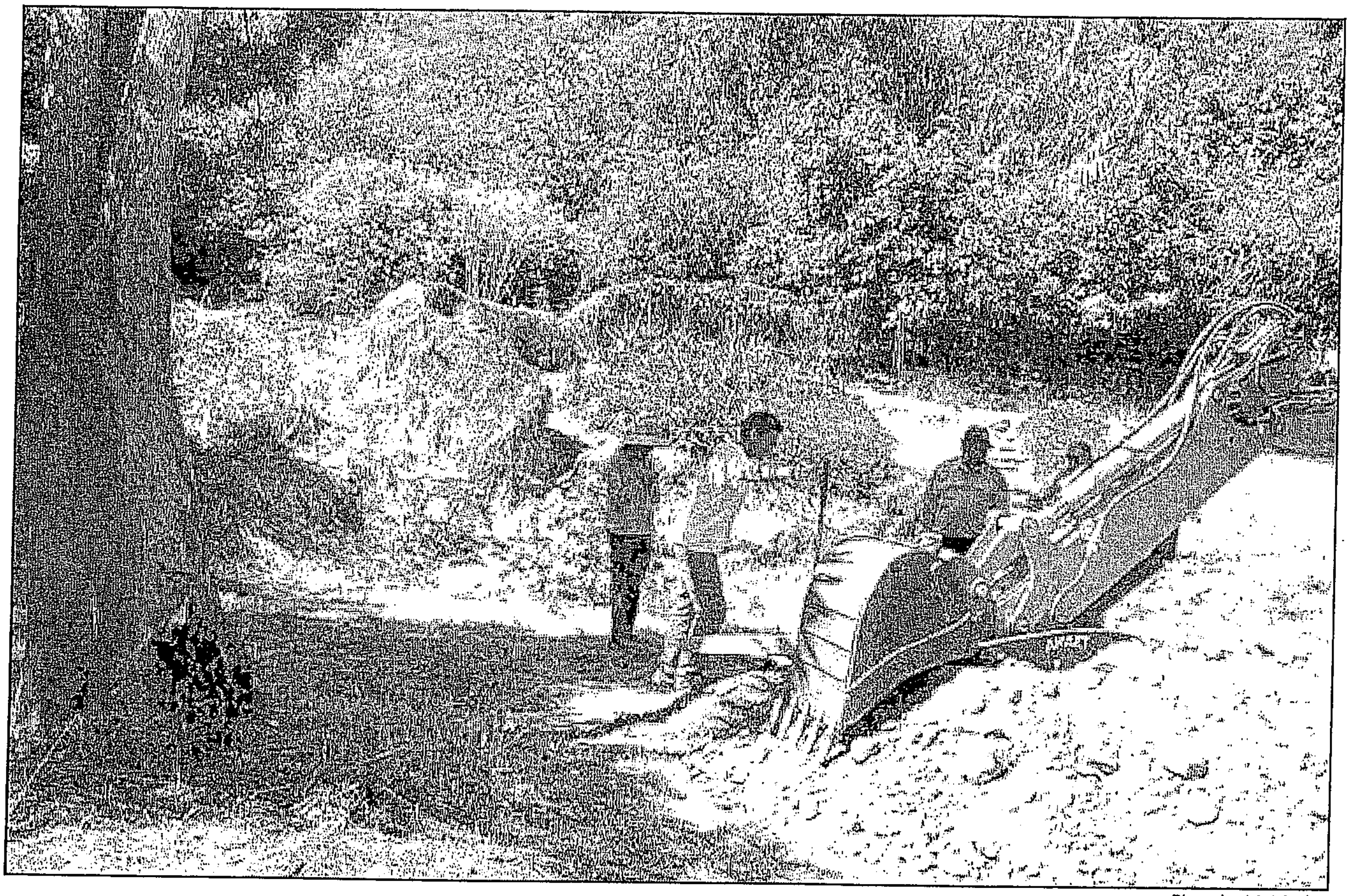


Photo by M. Mealey
Area F Overview

By Marla Mealey
Associate State Archaeologist
Southern Service Center
California State Parks

Topanga State Park Archaeological Test Trenching
For Rodeo Grounds Berm Removal Project

INTRODUCTION:

The Rodeo Grounds Berm is located approximately 2,500 feet upstream from the ocean interface of Topanga Creek within Topanga State Park. During preliminary field survey and inventory work at the time that California State Parks acquired the Lower Topanga Canyon property, local informants, park staff, and research conducted using archival maps and aerial photographs indicated that the berm was originally installed sometime during the late 1960s and then reinforced and enlarged in the 1980s. It was created to hold back and divert flood waters from the adjacent Topanga Creek in order to protect homes and property within the area known as the Rodeo Grounds. Because State Parks is removing the residences and because the berm is interfering with the natural flow of the creek, it was proposed that the berm be removed to restore the natural floodplain, creek channel, and sediment transport systems.

No archaeological sites or features are known or recorded within the project area. Sophie Bayler recorded CA-LAN-133 at the mouth of Topanga Canyon in 1905. King (2000:56) noted that one of Harrington's informants mentioned a cemetery with whalebone markers near the mouth of Topanga Canyon close to the beach. This could be the same location as CA-LAN-133; however, local residents reported that a burial ground existed in the area now known as the Rodeo Grounds. One long-time resident said he visited the Rodeo Grounds in the 1960s and remembers whale bones sticking out of the ground. A local Indian told him that it was a Native American burial ground (Shabel & Mealey 2001). The archaeological survey of the Rodeo Grounds did not identify any surface evidence of Native American cultural materials; however, it is possible that cultural deposits are buried under alluvial materials deposited by the adjacent creek, or under fill brought in during construction of the residences in the Rodeo Grounds itself. Additionally, Lower Topanga Canyon has been designated a sacred site by local Native American groups and is on the list of sacred lands maintained by the California Native American Heritage Commission.

Archaeological monitoring of four borehole excavations within the berm itself was carried out in February 2005. No cultural resources were observed during these excavations and it was determined that the berm was constructed out of fill materials (Sampson 2005).

Archaeological testing within the Rodeo Grounds was proposed to determine the presence or absence of buried cultural materials and potential for impacts to cultural resources from the berm removal project. A Native American monitor was contacted to be present during this work, to ensure avoidance of significant impacts to sacred or culturally significant resources.

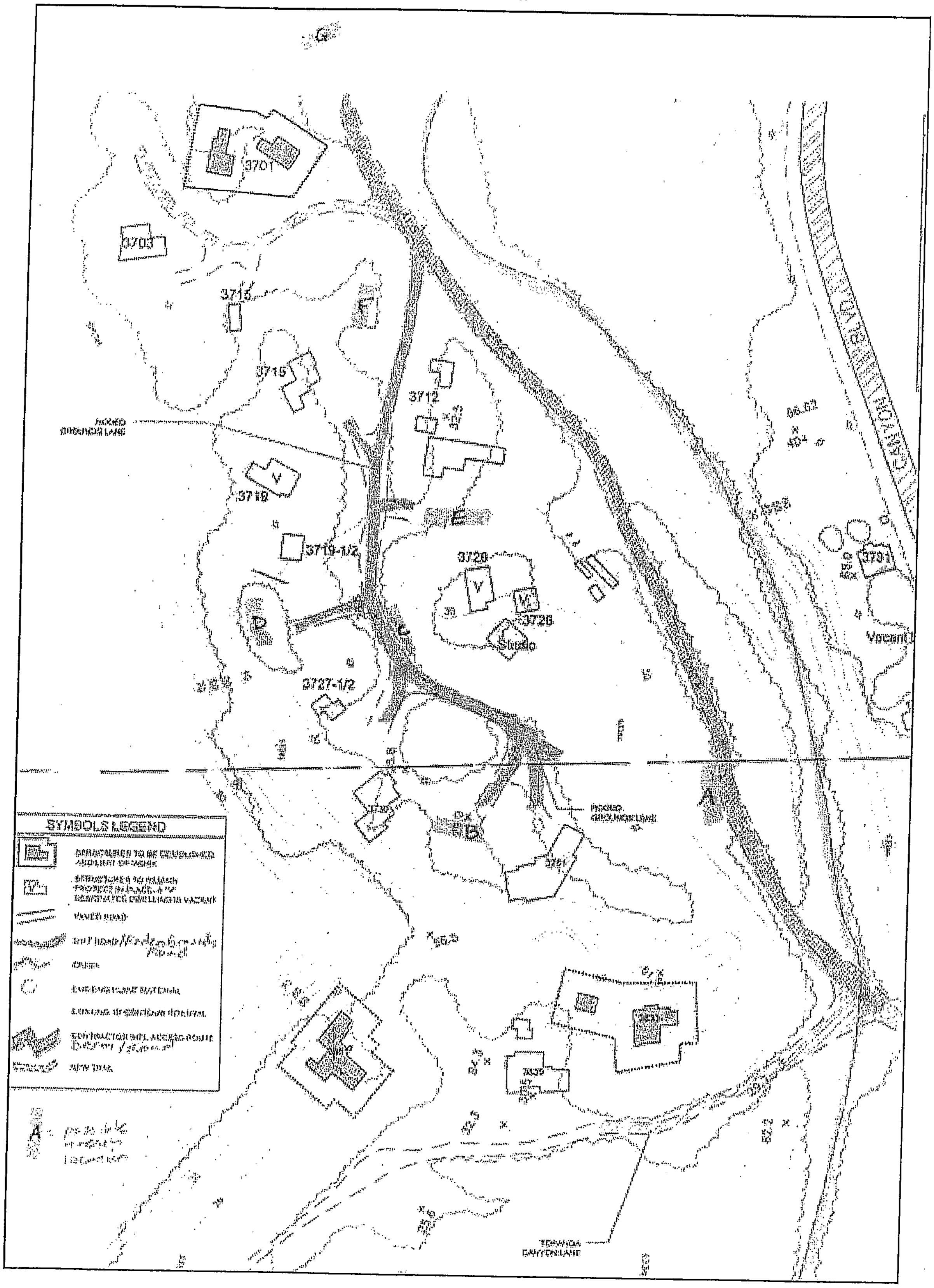
METHODS & RESULTS:

In order to determine presence or absence of buried cultural deposits, seven trench locations were selected throughout the Rodeo Grounds (see Figure 1). Trench locations were selected based on area of possible impacts from berm removal, accessibility for equipment, and avoidance of native trees and underground utility lines. Every effort was also made not to block or restrict access for residents still living in the area.

Testing was carried out on October 3, 2005. Project personnel included Marla Mealey—Associate State Archaeologist, Andy Pillado—State Parks Archaeologist, Greg Dorame—Native American Monitor, Dale Skinner—Park Maintenance Chief, and Brent Johnson—Park Maintenance Worker.

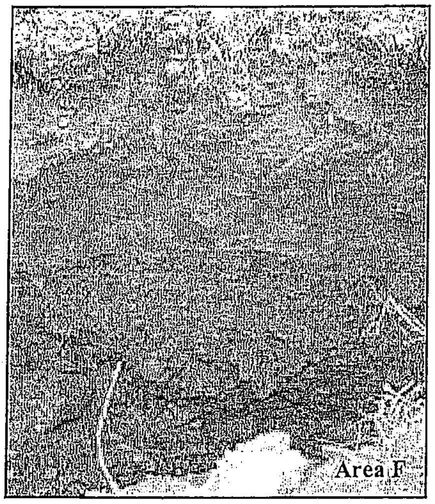
Work started at Area F (see Figure 1) then moved to Areas E and D. Area C was excavated to approximately 50 cm when a water line was uncovered and that location was abandoned. It was determined that Area A was inaccessible for the equipment, so an alternative location was selected and given the designation of Area H. Finally, Area B was excavated. Area G was abandoned because it was determined that it was within the berm.

FIGURE 1



3701
3703
3715
3712
3719
3719-1/2
3728
3726
Studio
3727-1/2
3731
Vacant
SYMBOLS LEGEND
CANYON BLVD

Trenches were excavated by backhoe. Trenching was monitored by archaeologists and the Native American representative. Samples of the excavated soils were screened through 1/8-inch hardware cloth. Trenches were backfilled after the examination of each area was complete. The results for each trench area are presented below in the order that they were excavated:


Area F

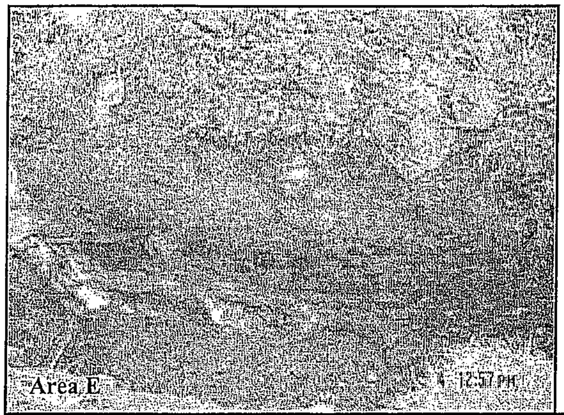
AREA F

0-70cm	Sandy Loam & building debris
70-125cm	Sandy / Shaley
125cm+	Stream cobbles & sand

The trench was dug to a depth of approximately 1.5 meters and approximately 4.5 meters in length.

Approximately .25 cubic meters of soil were screened through 1/8-inch hardware cloth.

Recovered materials include a couple pieces of modern glass and construction debris (plaster, wood, & brick).



Area E

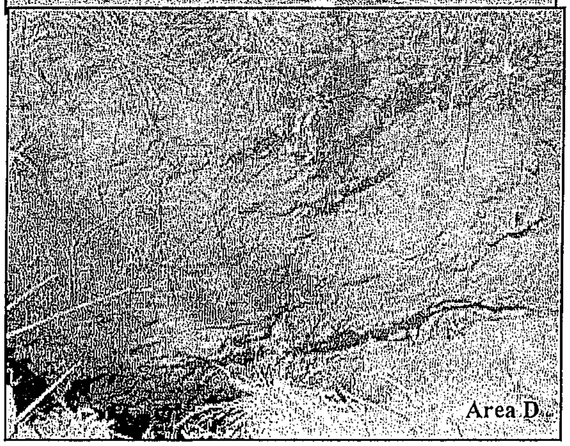
AREA E

0-80cm	Loamy soil, darker than in Area F trench with more moisture. Some chunks of clay observed. Not as much building debris observed here.
80-135cm	Sandy soil with some smaller cobbles
135cm+	Stream cobbles & sand

Trench was dug to a depth of approximately 1.5 meters and approximately 3.5 meters in length.

Approximately .20 cubic meters of soil were screened through 1/8-inch hardware cloth.

Recovered materials include modern or recent historic glass and one small piece of porcelain. Glass is mostly bottle glass with a few pieces of window glass and a couple pieces of mirror.


Area D

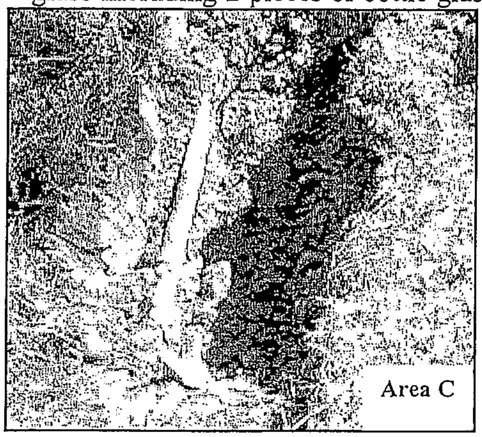
AREA D

0-60cm	Disturbed Loamy soil & building debris.
60-120cm	Sandy loam tan soil
120-150cm	Sandy with smaller cobbles
150cm+	Stream Cobbles & sand

Trench was dug to a depth of approximately 1.6 meters and approximately 3.5 meters in length

Approximately .25 cubic meters of soil were screened through 1/8-inch hardware cloth.

Recovered materials include modern construction debris and glass including 2 pieces of bottle glass, 1 piece of window glass, 4 pieces of thick mirror glass, and 1 piece of melted glass. Additionally 2 pieces of black and tan glazed pottery were also recovered. Part of a brick foundation was encountered in the southern end of the trench.

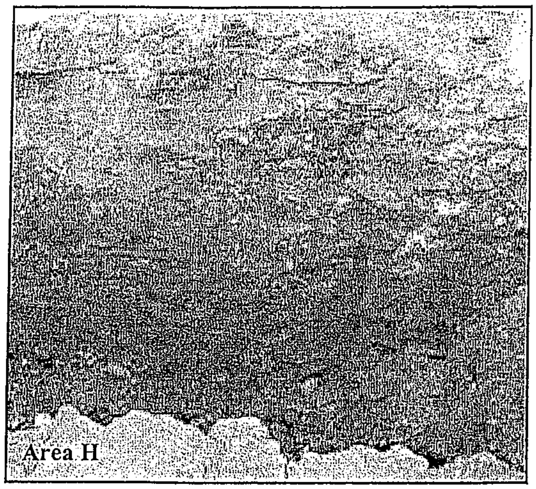

Area C

AREA C

0-50cm	Disturbed fill

This trench was only dug to a depth of approximately 50 cm when a waterline was uncovered. Trench was abandoned.

AREA A
Inaccessible for equipment. Trench was abandoned and new area (Area H) was selected.



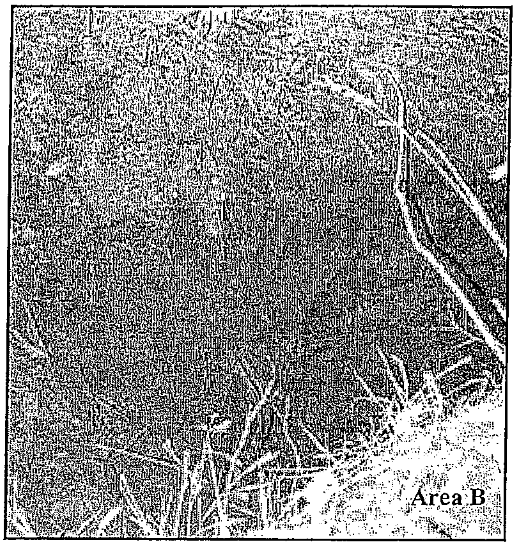
AREA H (new area—see Figure 2)

0-40cm	Disturbed roadbed & fill
40-80cm	Moist clayey loam
80-110cm	Sandy with smaller cobbles
110cm+	Stream cobbles & sand

Trench was dug to a depth of approximately 1.2 meters and approximately 3 meters in length.

Approximately .2 cubic meters of soil were screened through 1/8-inch hardware cloth. Soils were moist with more clay than other trenches and did not go through the screen as well.

No cultural materials were recovered at this location.



AREA B

0-70cm	Clayey loam (less clayey than at Area H)
70-130cm	Sandy with small cobbles
130cm+	Stream Cobbles & sand (hit water table at 130cm)

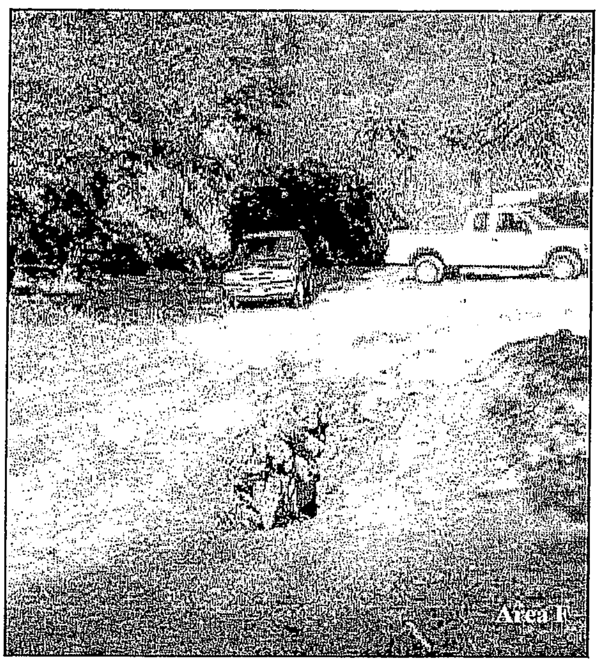
Trench was dug to a depth of approximately 1.35 meters and approximately 3.5 meters in length.

Approximately .25 cubic meters of soil were screened through 1/8-inch hardware cloth. Soils were moist to wet (especially near the bottom of the trench) making screening somewhat difficult.

Recovered materials include 3 pieces of window glass, more than 10 pieces of mirrored glass (mostly thin, one piece thicker), and construction debris (plaster and wood fragments).

AREA G
Abandoned due to location within the berm and proximity to borehole test location (already tested).

Additional Photos



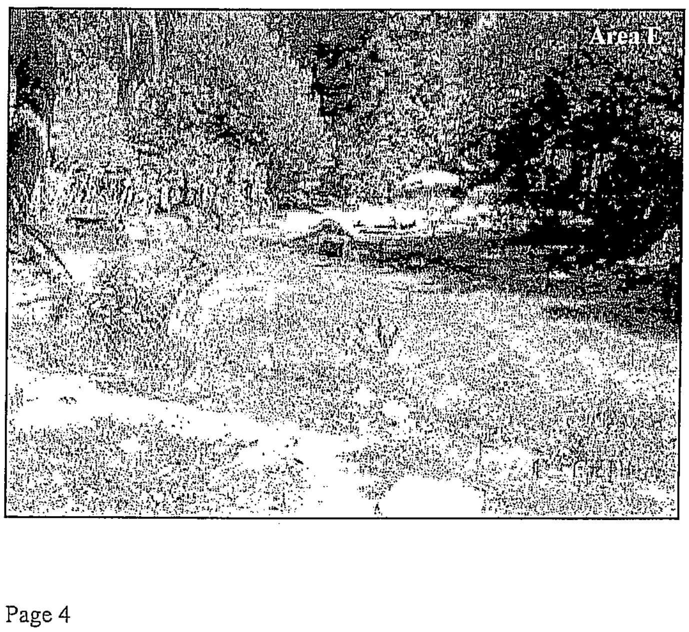
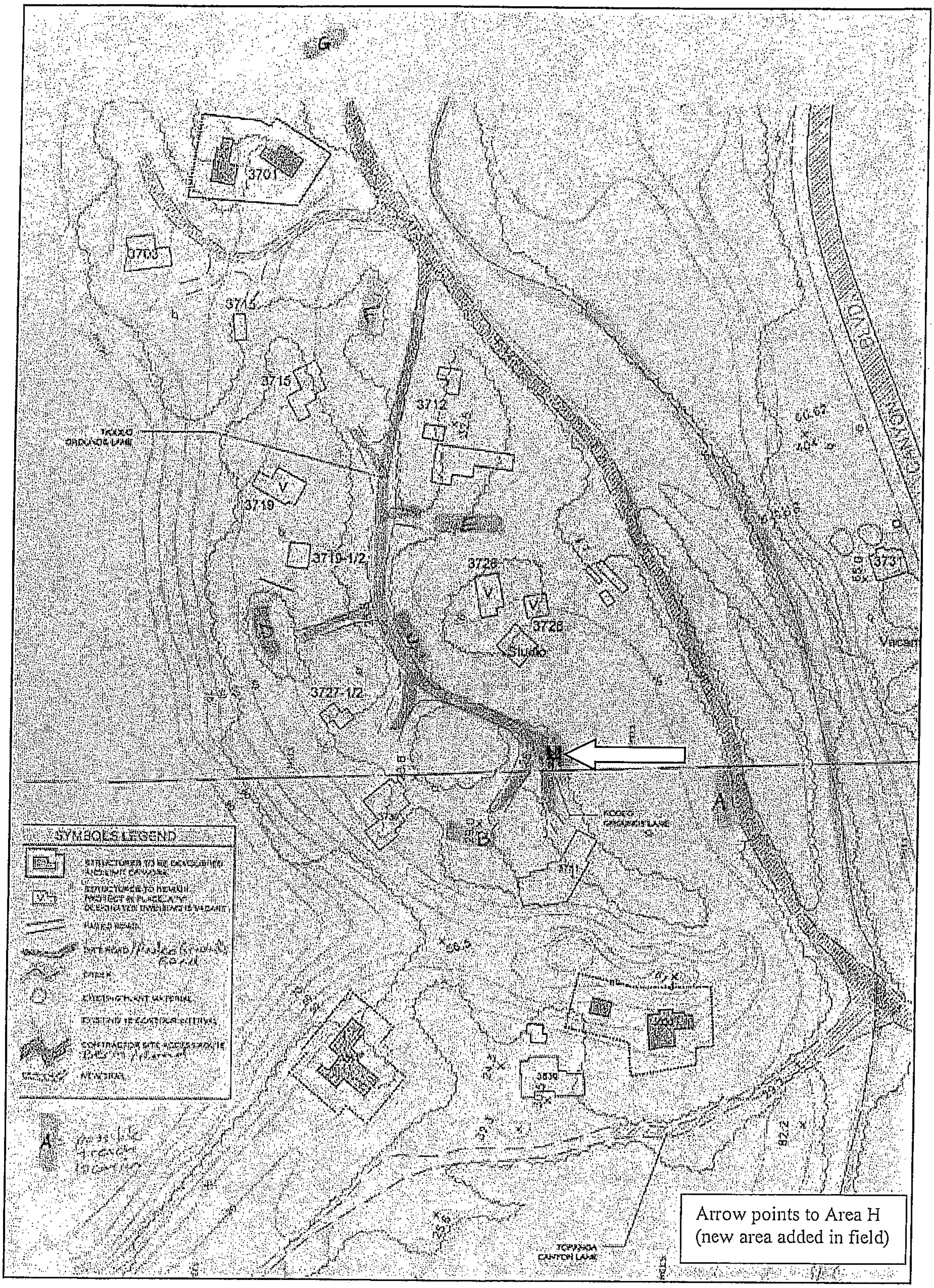
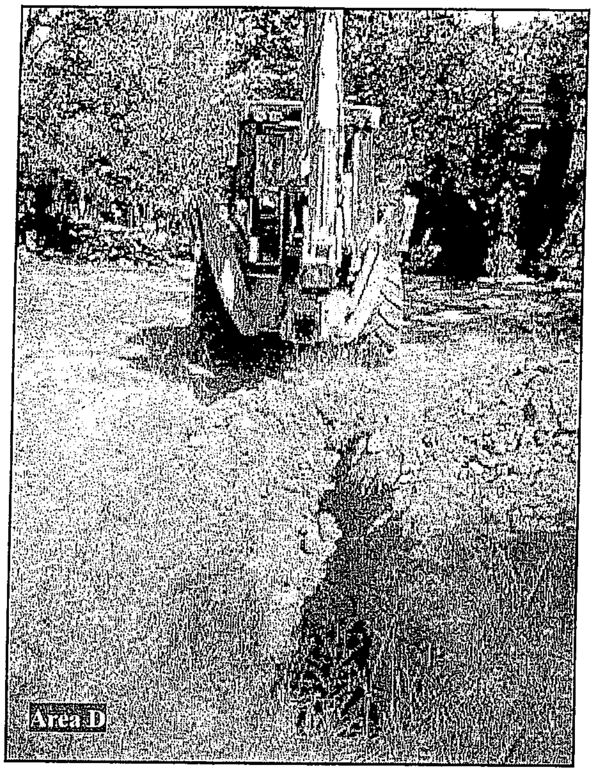


FIGURE 2

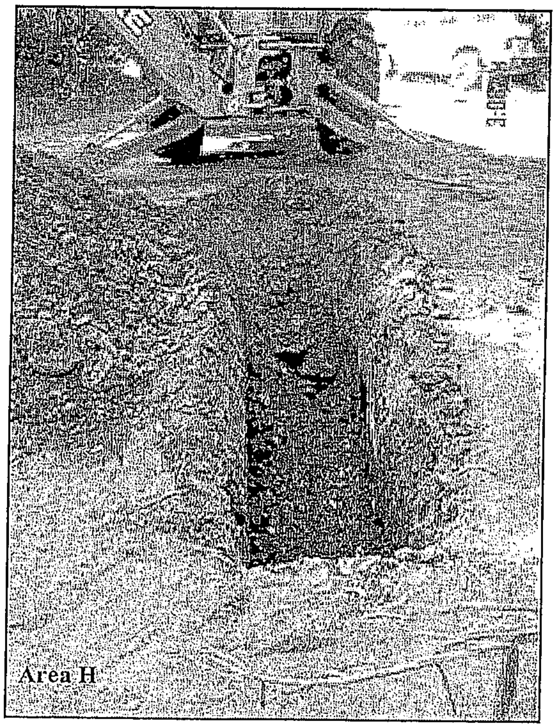

G
3701
3700
3715
F
3715
3712
RODEO GROUNDS LANE
3719
E
3719-1/2
3728
3726
Studio
D
C
3727-1/2
3731
Vacant
H
A
RODEO GROUNDS LANE
B
3741
SYMBOLS LEGEND
3839
TOPANGA CANYON LANE
Arrow points to Area H
(new area added in field)

Additional Photos (continued)

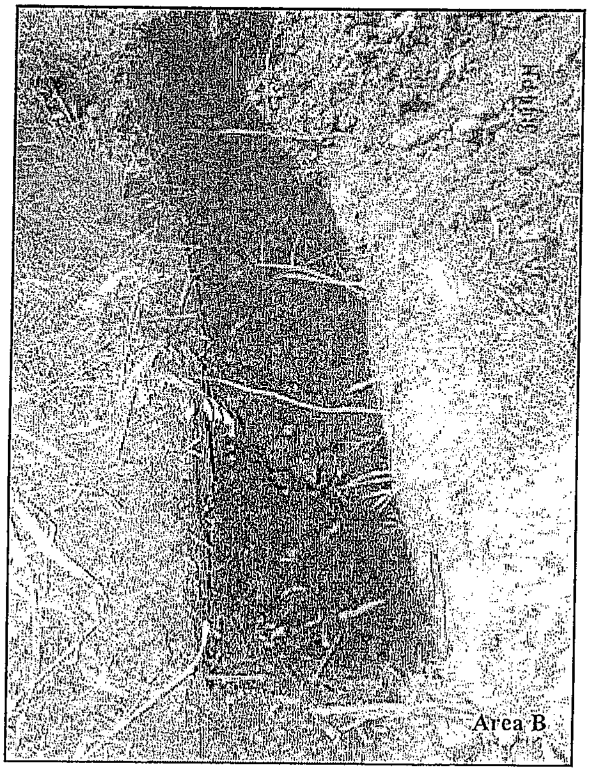


Area D

Area C



Area H



Area B

RECOMMENDATIONS:

Based on the results of this archaeological testing work, it appears that the areas of the Rodeo Grounds that may be impacted by the berm removal project are entirely within the historic creek bed and that there is no potential for cultural resources to be damaged or destroyed by such work. The potential still exists for cultural resources to be located on terraces along the edges of the drainage or on the small natural ridgeline that extends out into the drainage from the west (see Figures 1 & 2). Any future subsurface work that occurs in those areas should be tested and/or monitored by an archaeologist and Native American representative.

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King, Chester

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Sampson, Michael

2005 Archaeological Monitoring of Four Borings within a 20th Century Berm at Lower Topanga Canyon. On File at California State Parks, Southern Service Center, San Diego

Shabel, Karen and Marla Mealey

2001 *Lower Topanga Canyon Acquisition Interim Management Plan, Cultural Resources Survey: Archaeology.* On file at California State Parks, Southern Service Center, San Diego.

Topanga State Park: Lower Topanga Canyon Acquisition
Interim Management Plan
Cultural Resources Survey
Historical Resources Evaluation Report

INTRODUCTION

This report is as an overview of the historical development of the area known as the Lower Topanga Canyon Acquisition to Topanga State Park. It is also meant to identify and assess the eligibility of potentially historic resources within the study area. Located in Los Angeles County, the approximately 1,659-acre tract is confined to the southern portion of the Santa Monica Mountains between the communities of Malibu and Pacific Palisades along Santa Monica Bay. Topanga State Park, in the City of Los Angeles, runs along its northern and most of its eastern boundaries. A section of the neighboring Parker Mesa residential tract, also in the City of Los Angeles, runs diagonally in a northerly to southerly direction along the study area's southeastern boundary toward Pacific Coast Highway. The latter, which runs in a westerly direction toward the acquisition's southwestern corner, also defines its southern boundary, separating it from the adjacent Topanga Beach. The acquisition's western boundary travels diagonally in a northwesterly direction from the historic starting point of the former *Rancho Boca de Santa Monica*, along a portion of the boundary with the City of Malibu. The remainder rises into rolling hills and steep arroyos along unincorporated land. Except for the neighboring Parker Mesa residential neighborhood, the land surrounding the subject property is sparsely developed mainly with large single-family homes. Bisected by the Topanga Creek and Topanga Canyon Boulevard, the roughly trapezoidal acquisition property extends about two miles in a northerly to southerly direction. The latter is a heavily traveled north/south highway corridor connecting the Malibu/Pacific Palisades coastline over the Santa Monica Mountains to western San Fernando Valley. The previously mentioned Pacific Coast Highway [PCH] is another heavily traveled traffic corridor that is the principal coastal route connecting Ventura County with the City of Santa Monica and the western section of the City of Los Angeles.[1]

Because its previous owner had speculatively held the acquisition property pending future development, the subject property is in a relatively undeveloped state when compared to its neighbors. Improvements are limited primarily to the southwestern portion, along PCH and approximately a mile north along Topanga Canyon Boulevard. The greatest concentration of structures is in the southwesterly portion, west of the intersection of Topanga Canyon Boulevard, along PCH, to the southwestern corner. Generally oriented toward the beach, the area consists of highway-oriented roadside commercial properties, including restaurants, a motel, and a market, with residential homes extending northward along the Topanga Creek drainage. A smaller grouping of widely spaced residential homes can also be found a mile or so north of the intersection near a sharp bend in Topanga Canyon Boulevard. The majority of these homes lie directly off the highway, while a small number are accessible by dirt road a short distance down along the creek bed. The remainder of the property, especially to the north and northeast, is undeveloped due to extremely steep brush-covered

[1] Mason and Mason, *Appraisal Report of the LAACO Ownership* (19 February 2001), 12-14; and Robert G. Cowan, *Ranchos of California* (Los Angeles: The Historical Society of Southern California), 1977.

mountainous terrain. In hindsight, the area's inaccessibility has led to the preservation of a unique open space for public recreational use.[2]

METHODOLOGY

The report presents the results of field survey work and research conducted between September and January of 2001-2002 to assess historic resources in the Lower Topanga Canyon Acquisition area of Topanga State Park. Primary and secondary sources used to prepare this report came from the records and archives of the following organizations: the California Department of Parks and Recreation, Southern Service Center, San Diego; California Department of Transportation, Sector 7 Offices, Los Angeles, and Departmental Library, Sacramento. Also consulted were the public libraries of the cities of San Diego, Los Angeles, and Santa Monica; the historical societies of Topanga and Pacific Palisades; the Automobile Club of Southern California Archives, Los Angeles; and the offices and files of the *Malibu Times* and the *Topanga Messenger*. In addition the research libraries and photograph collections at UCLA, California State University, Northridge, and San Diego State University were also consulted. Personal and telephone interviews were held with several current and former residents of the study area.

During the field survey, research, and evaluation phases, the *U.S. National Park Services' National Register Criteria for Evaluation* were used to determine the potential eligibility of the extant buildings, structures, objects, districts and cultural landscape features for the National Register of Historic Places. In summary, the Criteria require that the properties be evaluated based on their age, historical significance, and their historical integrity.[3] These are the accepted criteria for establishing historical significance for both the California Environmental Quality Act (CEQA) and California Public Resources Code 5024.

SUMMARY

The subject property has been witness to various overlapping periods of Southern California's history, from Spanish Colonial to modern times. The first period is associated with the expansion of automobile-oriented tourism and recreational opportunities along Santa Monica Bay and up into the coastal mountains between 1915 and 1933. It also represents the most significant period of the area's history in which the property's then owner, the *Los Angeles Athletic Club*, attempted to develop the southwestern section into an upscale yacht harbor and rustic mountain retreat. Although the project never materialized as LAAC intended, the area developed on its own into a vibrant beach-oriented vacation community. Concentrated in an area between the beach and the Topanga Creek lagoon, the area, known as *Topanga Beach Tent City*, contained as many as 125 tents, small cabins, bungalows, and cottages, as well as a number of small highway-oriented businesses. The second phase occurred between 1933 and 1940, when highway improvements led to intensive environmental change, primarily between Topanga Beach and the lagoon area. The most significant event to occur during this time was a disastrous brushfire and subsequent flooding that reportedly destroyed upward to 118 homes and structures at the canyon's mouth. The third phase began immediately after World War II, between 1945 and 1965, when the lower residential and commercial area experienced ongoing change and development. The fourth phase, from 1965 to 1980, saw the loss of more cabin homes through flood, fire, and the State's acquisition and conversion of the beachfront into a state beach. The final phase, from 1980 to the present, witnessed the infusion of newer more conventional and permanent homes. By this, through fire, flood and neglect, the area's built environment no longer reflected its earlier significant period of historic development.

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[2] Mason and Mason, *Appraisal Report,* 13.

[3] United States Department of the Interior, National Park Service, *National Register Bulletin No. 15: How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: Author, 1999), 2, 41 and 44.

Overall, the Lower Topanga Canyon acquisition property's surviving cultural landscape is a piecemeal agglomeration of unrelated parts. Some individual buildings are representative examples of the area's various phases of historic growth and development and meet the necessary criteria for National Register eligibility. However, the remaining have lost their historic integrity either through inappropriate remodeling, alterations and/or repairs and fail to convey their association with any historical significance and therefore are not eligible as historic resources.,.

HISTORIC BACKGROUND

Periods of Spanish Exploration and Mexican Ranchos

Although native peoples had occupied the lower canyon and coastal area thousands of years prior, the land now known as the Lower Topanga Canyon Acquisition's historical record technically begins in 1542. Among the first Europeans to have seen the area was Captain Juan Rodrigues Cabrillo [pronounced Cabrilho in his native Portuguese] and his crew who were sailing north along the coast to explore the northern limits of Spanish Alta California's coastline. On October 8, 1542 he sailed north from the port of San Miguel [today's San Diego] into a bay he named "La Bahia de Los Fumos" or "The Bay of the Smokes," so named because of the many native campfires he saw along its shore. Historian Herbert E. Bolton believed that Cabrillo was describing Santa Monica Bay, and that he anchored his ship some six miles due west of the Topanga Creek outfall the following day. Referring to the anchorage as *La Ensenada Grande* (The Large Cove or Inlet) he ordered his crew to fill the ships' water casks in the nearby Malibu Creek. The following day, he set sail and continued his reconnoiter of the California coastline.[4]

Although Cabrillo had claimed the land for the Spanish crown, there was no effort to occupy California until 1769. That year Spain again focused its attention on settling its Alta California territory, where it would establish a number of military forts or *presidios*, religious missions, and civilian settlements or *pueblos*. Scouting parties from Governor Gaspar de Portolá's expedition from San Diego to find and occupy Monterey Bay reportedly viewed the Lower Topanga Canyon Acquisition's beach and mountains from what is now Santa Monica. Determining that the beach route was untenable, they recommended that Portolá use another route. Traveling northward through the Cahuenga and Sepúlveda passes, they trekked inland through what is now the San Fernando Valley. Along the trail blazed by Portolá, later known as *El Camino Real*, Portolá and his group stopped at two Native American villages along the lee side of the Santa Monica Mountain range near present day Encino. The local villagers, who anthropologists would later refer to as the *Tongva*, told Portolá of sighting sailing ships along the coast (possibly Spanish Manila galleons on their way south to Acapulco). Scattered throughout the Greater Los Angeles basin, the Tongva's legacy remains in such place names as, Cucamonga, Cahuenga, and Topanga. The latter's original location is unknown, however linguists have interpreted the name to mean a special place that was "high," "above" or in the "sky." The Spanish missionaries at San Fernando recorded the name "Topanga" in their records, but failed to indicate its specific location.[5]

The name "Topanga" appears on a map in 1838 when Francisco Marquez and Ysidro Reyes sent a petition for their acquisition of the *Rancho Boca de Santa Monica* (literally: the Ranch at the Mouth of

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[4] Fred E. Basten, *Santa Monica Bay: the First 100 Years* (Los Angeles: Douglas-West Publishers, 1974), 2 and 54 and Betty Lou Young and Thomas R. Young *Pacific Palisades: Where the Mountains Meet the Sea* (Pacific Palisades: Pacific Palisades Historical Society Press, 1983), 9-10.

[5] Young and Young, *Pacific Palisades*, 9; Kevin Roderick, *The San Fernando Valley: America's Suburb* (Los Angeles: Los Angeles Times Books, 2001), 19-20; Louise Armstrong York, ed., *The Topanga Story* (Topanga: Topanga Historical Society, 1992), 1; and Leonard and Dale Pitt, *Los Angeles: A to Z: An Encyclopedia of the City and County* (Berkeley: University of California Press, 1997), 504.

Santa Monica in Spanish). The 6658-acre ranch was originally granted to Antonio Ignacio Machado and Francisco Javier Alvarado in 1827. However, both men and their descendents relinquished all rights to Rancho Boca de Santa Monica to Marquez and Reyes.[6]

On August 13, 1839, Alcalde Antonio Machado, along with Marquez and Reyes, surveyors and other officials met at the southwestern most corner of Rancho Boca de Santa Monica. Historian Ernest Marquez indicated that they met at a point designated on the diseño as "*Topanga Point*." He describes its location as "a bluff, close to the sea just west of the entrance to Topanga Canyon. This would place it west of and slightly south of the intersection of Old Malibu Road and PCH. From this point, one of the two "cordsmen" or surveyors drove a pole into the ground. His partner then rode his horse southeasterly across "*Cañada Topanga*" (A *cañada* is a Spanish term for a gully or ravine) overgrown with thule" along the mouth of Topanga Creek. Behind him trailed a length of buckskin *la riata* (lariat) or rope measuring a *vara* (277.5 feet) from pole to pole. When the first rider reached the end of his lariat, he pulled it taught and drove his pole into the ground. He then remained stationary while his partner rode pass him until he came to the end of his line. They repeated the process along the shore until they reached a gully in the cliffs some 7,500 varas to the southeast (Montana Avenue in the City of Santa Monica). Traveling north some 4,000 varas (to a point near today's Mandeville Canyon and Sunset Boulevard), the team was unable to measure the rancho's northerly boundary due to steep mountainous terrain. They merely extended an imaginary line over the ridges to a point past Topanga Canyon. Satisfied, the alcalde ordered the survey completed at this point, with the westernmost boundary line running, *mas o menos* (more or less) diagonally from the present community of Fernwood to the point of origin.[7]

Other than Topanga Point, there are no other references to the Lower Topanga Canyon Acquisition area during either the Spanish Colonial or Mexican Rancho periods. Marquez and Reyes, who built permanent adobe homes closer to today's Santa Monica, hunted wild game, including bear, in the canyons and mountains. They also used Native American or Mestizo vaqueros and laborers to run and process large herds of cattle and sheep. In the spring, these "cowboys" would hold a series of *rodeos* or round ups where they gathered and segregated livestock and branded newborn calves. During the fall, they held *matanzas*, where they slaughtered cattle and skinned them for their hides. Used as an important cash crop, the cured hides could be traded to ship captains at San Pedro or other landing places along the shore for manufactured goods from waiting ships. Important parts of the rancho lifestyle, both the matanza and rodeo were also festive social events featuring exhibitions of horsemanship, races, huge barbecues, and dancing.[8] Rancho Boca de Santa Monica was associated with one of the lengthiest land disputes in 19th century Los Angeles. In December 1839, Francisco Sepúlveda claimed that it was taken from his original 1828 grant for *Rancho San Vicente*, and that his renewed claim, *Rancho San Vicente y Santa Monica,* should include portions of Marquez and Reyes' claim. Disputes regarding who owned what continued for over forty years, with the Los Angeles District Court finally settling the issue in 1892.[9]

Anglo-American Acquisition

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6 Cowan, *Ranchos of California*, 89 and 95; Young and Young, *Pacific Palisades*, 10-11; and Ernest Marquez, *Rancho Boca de Santa Monica, In Brand Book Twenty: Rancho Days in Southern California: An Anthology with New Perspectives.* Kenneth Pauley, ed. (Studio City: Westerners, Los Angeles Corral, 1997), 89.

7 Marquez, *Rancho Boca de Santa Monica*, 89-90; and Young and Young, *Pacific Palisades*, 11-12.

8 Marquez, *Rancho Boca de Santa Monica*, 90-91; and Young and Young, *Pacific Palisades*, 12-13.

9 Marquez, *Rancho Boca de Santa Monica*, 91; Young and Young, *Pacific Palisades*, 14; and General Telephone Company of California, *Malibu Telephone Directory (April 1968), 75.*

As a result of the Mexican War of 1846-1848, and the signing of the Treaty of Guadalupe Hidalgo on February 2, 1848, Alta California became a territory of the United States. While the treaty guaranteed prior ownership of the land to pre-war inhabitants, they faced tremendous pressure to hold these claims. The aftermath of the Northern California Gold Rush also brought thousands of land-hungry immigrants into Southern California who argued that the former rancho lands should become public property by rights of conquest. Many land rich but money poor rancheros lost their land as payment to unscrupulous lawyers or judges who dragged their cases for years. The Marquez and Reyes families were no different. However, they were eventually able to support their claim. Nonetheless, by 1872, mining equipment supplier and cattleman Colonel Robert S. Baker bought up approximately 2,000 acres of the rancho from Ysidro's descendant María Antonia Villa de Reyes. Baker had also purchased the neighboring San Vicente y Santa Monica and part of *Rancho la Ballona* to the south. Like many Anglo-American entrepreneurs, he hoped to found a town, establish a railhead and wharf, and eventually became a millionaire for his efforts. In 1874 he and his partner, Senator John P. Jones of Nevada, proposed to extend a railroad from the latter's Inyo County silver mines to the new town of Santa Monica.[10]

Because Baker held an undivided claim to Rancho Boca de Santa Monica, he had no idea where his property ended and that of Francisco Marquez' heirs began. As a result, he filed a complaint in the Los Angeles District Court in 1874 requesting the Court partition the rancho between himself and Marquez' heirs. A United States Surveyor had to settle the boundary issue. The surveyor repositioned the boundary between the rancho and neighboring San Vicente y Santa Monica ranch in Baker, reducing the heir's claim to a line below the original 1839 Juridicial Possession line. On July 6, 1882, the Los Angeles County Superior Court upheld Baker's claim.[11]

As part of the settlement, three impartial referees had subdivided the remainder of the rancho to each heir. One of these, Bonifacio Marquez, received 1,857.2 acres of land constituting the rancho's western most section. Except for a 198-acre parcel in the section's southeastern quarter (Parker Mesa), Bonifacio Marquez' "Allotment No. 2" constitutes the entire Lower Topanga Canyon Acquisition property. Eight years after his death, in January 1899 his widow sold the property at auction for $7,392.04 to E. C. Stelle.[12]

Homesteading and Hunting

All indications suggest that the Lower Topanga Canyon Acquisition remained relatively undeveloped until the first quarter of the 20th century. That does not diminish its geographic significance. The acquisition's southwestern and western sections were important early transportation corridors. From prehistoric times to the Mexican Rancho period, *Arroyo Topanga* or Topanga Canyon was a natural corridor linking Santa Monica Bay to the western San Fernando Valley. Likewise, the low bluffs and sandy beach along its shore served as a connective route between the nearby *Rancho Topanga Malibu Sostomo Simi Sequit* to the west and neighboring ranchos and the Los Angeles pueblo to the east. As time progressed, these routes became important wagon roads to growing numbers of people homesteading in and around the present community of Topanga. Due to travel restrictions through the neighboring Rindge Ranch (the former Malibu rancho), Topanga Canyon served as an alternate route for cattlemen driving their herds from Ventura County to the railheads and wharves between Santa Monica and San Pedro. Also attracted to the area were hunters seeking game in the Santa Monica

[10] Marquez, *Rancho Boca de Santa Monica*, 93-99.
[11] Ibid., 99.
[12] Ibid., 100-101; and Mason and Mason, *Appraisal Report*, 14.

Mountains. Invariably, the coastal beach, especially the marshy tules along Cañada Topanga also attracted bird hunters as well as fishermen.[13]

Automobile-oriented Tourist's Weekend Retreat

By 1898, a somewhat improved Topanga Canyon Road extended from the western San Fernando Valley over the mountains to what was then known as the "Malibu Ranch Road." Improved access to the beach and mountains facilitated an influx of travelers and visitors attracted to the beach and rustic mountain scenery. Between 1900 and 1920 a number of tourist-oriented camps as well as homesteads sprung up in the Topanga Canyon and surrounding mountain area. One of these, *Camp Elkhorn*, was situated in the Lower Topanga Canyon area. One of the oldest tourist camps in the area, it was located approximately 1 _ miles north of the intersection of Topanga Canyon Boulevard and PCH. A 1920s-era travel brochure described it as "a pleasant spot for the week-end stopover." The camp featured "a store and café in connection with the cabins . . . as well as a good dancing pavilion." Like many of the cabin and homestead sites located within the Topanga Creek drainage, Camp Elkhorn was literally wiped off the earth in 1916 as torrential rain-swollen floods scoured the canyon clean from a point known as "The Narrows" all the way to the beach. Undaunted, the camp's operators rebuilt and Camp Elkhorn continued to serve as a staging and jumping off point for hiking and hunting expeditions into the mountains. The camp remained in operation until 1938, when floodwaters again roared through the canyon.[14]

The growth of the Lower Topanga Canyon area as part of a major early 20th century tourist destination represents an overall expansion of tourism as a major growth industry in the Greater Los Angeles area during this time. As early as the 1870s, local boosters advertised the area's year-round sunshine and spectacular natural surroundings to a growing number of visitors arriving on the transcontinental railroad. By the 1890s, affluent travelers flocked to the area as part of their whirlwind tours of the American West. A number of upscale resort hotels, such as the *Arcadia* in nearby Santa Monica, soon sprang up along local steam and electric rail lines. As the automobile engine became more reliable, a growing number of motorized "stage" or bus lines provided service between urban rail stations and outlying areas.

Such was the case with the Lower Topanga Canyon area. In 1909 an automobile stage line began regular service between Santa Monica and the mountain camps along Topanga Creek. An improved 3-lane concrete-paved highway, reportedly costing $8,400 a mile, was completed through Topanga Canyon in 1915. Terminating at Ventura Boulevard at the town of Girard (now Chatsworth), it became the principal north/south highway between Los Angeles and western Ventura County. The improved road facilitated automobile travel through one of the few accessible mountain passes connecting the western San Fernando Valley to the coast. Impressed with the road's scenic beauty, on May 29, 1915 the *Los Angeles Times* conducted a "Scenic Automobile Tour" to celebrate its official opening. The road's builders and local real estate boosters wasted no effort in garnering hyperbolic platitudes upon the new road. Highway engineers touted it as "one of the most remarkable feats of road engineering in existence." A prominent member of the Automobile Club of Southern California effused, "The route is a wonder! It is in a class by itself as far as the engineering is concerned and as for beauty, there is no need of trying to describe that."[15]

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[13] Cowan, *Ranchos of California*, 104; York, *The Topanga Story*, 32 and 42; Young and Young, *Pacific Palisades*, 39; United States Geological Survey, *Topanga*, 1877.

[14] York, *The Topanga Story*, 39 and 47; United States Geological Survey, *Topanga*, 1928 and 1932; and Francis Brunner, *Southern California's Prettiest Drive* (Los Angeles: Author, 1925, reprinted 2000, Topanga Historical Society), 8.

[15] Leonard and Dale Pitt, *Los Angeles: A to Z*, 373 and 505; *Los Angeles Sunday Times*, 16 May 1915, Part VII, 1; and *Western Construction News* (10 May 1930), 233.

Southern California's Prettiest Drive: "A Sure Cure for the Blues"

Santa Monica businessman Francis Brunner promoted Topanga Canyon Boulevard, as well as the connecting Coast Road as "Southern California's Prettiest Drive." Brunner, who had taken over the earlier automobile stage service in 1922, regarded the canyon as "the loveliest in all California." Describing the road in 1925, he said that it led "one quickly from the coast to higher altitudes." Two interesting roadside attractions located along the road in the Lower Topanga Canyon Acquisition area described by Brunner are "a deep, rock-walled canyon" (the Narrows) and nearby "Sentinel Rock—the guardian of Topanga, on duty at the canyon's narrowest point." While not yet identified on any map during the research phase of this report, it appears that Sentinel Rock may be the huge 350-foot-high rock outcropping overlooking Topanga Canyon Road approximately one mile north of PCH.[16]

Brunner drove a Dodge and later a Packard passenger sightseeing car over the mountain and beach routes. Brunner promised that a ride on the *Topanga and Las Flores Canyon Stages*, to the Topanga summit "will improve a poor appetite, get rid of colds, relax nerves, and provide a sure cure for the 'blues'." Stops along the way were not limited to the mountains. The Las Flores Canyon route stopped at Topanga Beach, a broad stretch of beach about a half mile long between Topanga Point and the "Natural Arch" (outside the present acquisition area). Here, according to the stage line's timetable and fare schedule, "swimming is the leading diversion, though dancing claims its share of the popularity." In addition, "Cabin accommodations are to be had at Topanga Beach Tent City."[17]

The completion of a graded dirt road through the Malibu Ranch in 1921, and the opening of Beverly (changed to Sunset in 1933) and Wilshire boulevards during the mid-1920s had a profound effect on the Lower Topanga Canyon Acquisition area. Automobile and truck traffic could now travel between downtown Los Angeles and the rich agricultural fields of the Ventura River delta, bypassing the long grades encountered on Highway 101 between Camarillo and the Sepúlveda and Cahuenga passes into Los Angeles. It also opened the coastal area to hundreds of auto-tourists seeking to enjoy the area's once inaccessible beaches and mountains. As traffic increased, motorists, farmers, and trucking firms lobbied the State and County to improve the route. As a result, in 1927 the State of California began construction of an improved 20-mile right-of-way through the Malibu Ranch. The ranch's owner May K. Rindge, had fought the project in the courts for years, blocking access during much of the early 1920s, but the U. S. Supreme Court had handed down its landmark decision a year earlier supporting the State's acquisition of the road under the law of eminent domain.

Prior to the Coast Road's construction, the State Highway Commission had recommended that sand from Topanga Beach be used to make concrete road pavement. However, there is no evidence of this ever having been done. The Commission is on record as stating that there wasn't enough sand for the job at this location. Therefore, it recommended that the supplier, the *Union Rock Company*, would have to ship sand in by rail and truck from its Los Angeles plants. Completed in June 1929, the scenic "Roosevelt Memorial Highway" (also known as State Alternate Highway 101A and Pacific Coast Highway) connected Santa Monica to the rich agricultural Ventura Valley river delta.[18]

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[16] York, *The Topanga Story*, 61; Brunner, *Southern California's Prettiest Drive*, 3 and 7; and USGS Topographic Map, *Topanga*, 1928, 1932, 1951, 1981.

[17] York, *The Topanga Story*, 61 and 146; and Brunner, *Southern California's Prettiest Drive*, 8 and 19.

[18] Young and Young, *Pacific Palisades*, 97, 113 and 152; Doris Gilliland, *The History of Rancho Malibu* [Masters Thesis] (University of Southern California, June 1947), 82; David F. Myrick, "*The Determined Mrs. Rindge and Her Legendary Railroad: A History of the Hueneme, Malibu and Port Los Angeles Railway*," in *The Ventura County Historical Society Quarterly*, vol. 41, no. 3. 1996: 35; Jo Hindman, *"The Big Ranch Fight,"* in *The Historical Society of Southern California* (137, March 1955): 67); and California Highway Commission, *Preliminary Report on a Proposed State Highway VII-L.A.-60-B in Los Angeles County, Malibu Ranch to Santa Monica, 7.385 Miles*, (Sacramento: California Department of Engineering, 16 September 1921): 4, 22; and Federal Writers' Project of the Works Progress Administration, *California: A Guide to the Golden State* (New York: Hastings House, 1939), 415.

The new coast highway elevated the Lower Topanga area from an end-of–the line destination to part of a major West Coast arterial highway running from the Mexican to the Canadian border. The natural and scenic wonders along the route between Santa Monica and the Malibu shoreline attracted hundreds of automobile owners who conducted day trips or weekend jaunts during the 1920s. In response, a number of entrepreneurs established places along the road where motorists could stop, perhaps have a picnic or eat at a roadside café, or stay and camp overnight. Although they relied on modern technology, these automobile-oriented recreationalists regarded autocamping as a simple, more leisurely paced opportunity to enjoy the road, nature, and promote the personal independence and family solidarity of preindustrial times.[19]

Los Angeles Athletic Club

Hoping to cash in on mobile Los Angelenos searching for leisure activities outside their ever-expanding city, the Los Angeles Athletic Club sought to convert the southwestern portion of the Lower Topanga area into a nautical as well as an automobile-oriented vacation destination. One of the oldest organizations of its kind, the LAAC was founded in 1880 as a men's athletic and recreation club. Among its members, who were some of the most influential men in the Greater Los Angeles area, was former mayor Frederick Eaton, who along with William Mulholland, had been influential in bringing Owens River Water to Los Angeles. Newspaper publishers Harry Chandler and William A. Spalding, along with land developers James P. Lankershim and his son-in-law Isaac Newton Van Nuys, were influential in developing real estate in the San Fernando Valley.[20]

It might have been by coincidence or design that the LAAC chose to purchase the 1,800-plus acre tract of land in the Lower Topanga Canyon area from its current owners Eli P. Clark, Moses H. Sherman and Robert Gillis. Pioneer developers of Los Angeles electric railway system during the 1890s, Clark and his brother-in-law Sherman, like Spalding, Lankershim and Van Nuys, were also involved in land development in the nearby San Fernando Valley. Robert Gillis, who still retained a one-ninth interest in the parcel, was co-founder of the Santa Monica Mountain Park Company, which was also involved in selling and developing the nearby Castellammare tract at the end of Sunset Boulevard. Gillis, though the Santa Monica Mountain Park Company, was also playing a key role in selling a $2 million tract to LAAC. Beginning in 1923, he was involved in negotiations with LAAC by which they would partner in the development of the 640-acre California Riviera subdivision in the Santa Monica Canyon area. As part of the deal, LAAC would get ten acres free for their Riviera Country Club and Golf Course. The Lower Topanga Canyon Acquisition, only a few miles away, was to be developed into a beach and yacht club with a $1.5 million-dollar breakwater and harbor. The remaining land would be used for backcountry activities.[21]

LAAC's acquisition and plans for the development of the Lower Topanga Canyon area is part of the larger regional trend throughout the mountains and beaches surrounding the Greater Los Angeles area. Initially established during the late 19th and early 20th centuries, country and yacht clubs were a means to preserve and express class-consciousness among Los Angeles' wealthy upper middle class. Through membership in such exclusive organizations, they could express their own interpretation of *noblesse oblige*: the obligation of honorable, generous, and responsible behavior associated with persons of high rank (or wealth). The purchase and conversion of raw land into more useful golf

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19 Young and Young, *Pacific Palisades*, 97; and Warren James Belasco, *Americans on the Road* (Cambridge, Massachusetts, 1979), 3-4.

20 Leonard and Dale Pitt, *Los Angeles: A to Z*, 84, 130, 238, 264, 480 and 522; Downtown News (7 November 1994), 34; and (16 November 1998), 28.

21 Leonard and Dale Pitt, *Los Angeles: A to Z*, 96, 130 and 465; Betty Lou Young, *Our First Century: The Los Angeles Athletic Club 1880-1980* (Los Angeles: LAAC Press, 1980), 120; and Young and Young, *Pacific Palisades*, 97 and 122-124.

courses, horse polo fields and riding trails, shooting and hunting ranges or yacht harbors, was seen as benefiting the general community by increasing the usefulness of what was referred to as "marginal" land. Strategically located at the intersection of two major highways, the yacht club would be easily accessible by automobile and greatly benefit the surrounding area. If, in the case of the Riviera Country Club, some of their members developing land in the area made money off the deal, then so much the better. Oddly enough, this was not the case at Lower Topanga Canyon; the proposed yacht club and harbor development never left the planning stage. Perhaps it was the prevailing economic climate, which foreshadowed the impending Stock Market Crash, but a disturbing number of exclusive athletic and country clubs were closing by mid-1927.[22]

Topanga Beach's "Tent City"

In spite of, or as a result of the yacht club project failure, by the late 1920s the Lower Topanga Canyon Acquisition area did not remain undeveloped. Contemporary accounts and historic photographs best illustrate this point. For example, Francis Brunner's description of the stage stop at the *Topanga Beach Tent City* included "cabin accommodations."[23] This is a bit of an understatement, as the subsequent historic photographs taken between 1923 and 1933 show Topanga Beach as a vibrant beach-oriented coastal community containing cabins, cottages, stores, and other beach and automobile tourist-oriented enterprises.

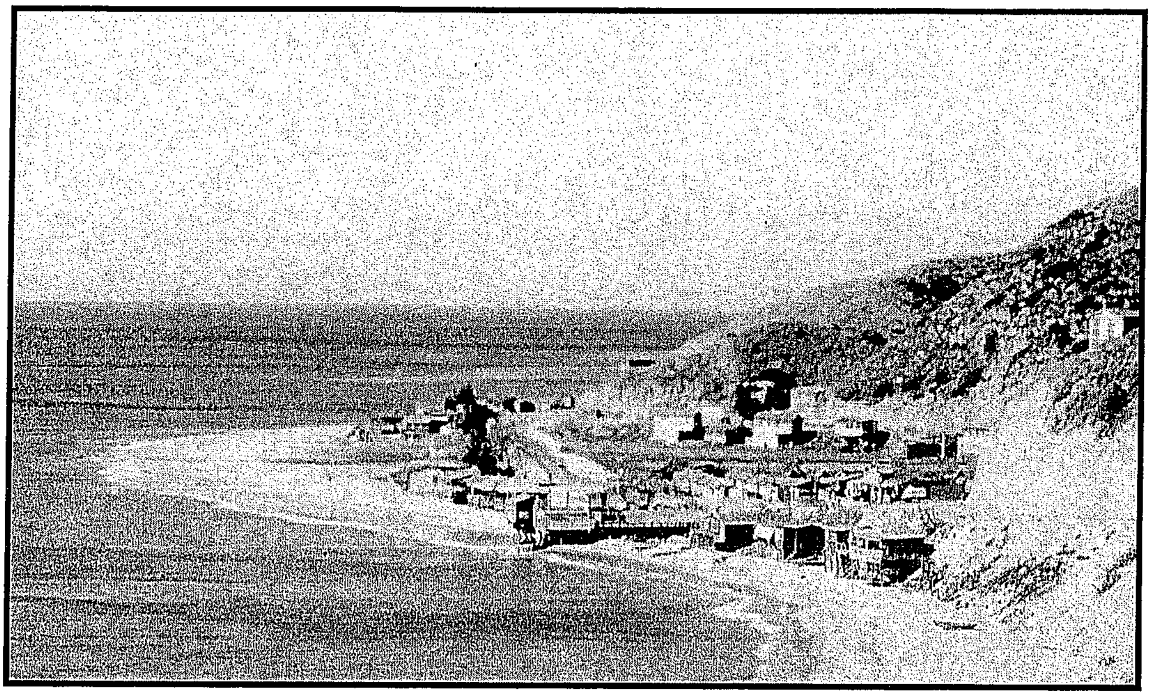
Photograph No. 1, taken from the hillside east of the intersection of the old Topanga and the Malibu roads clearly shows that the "Old Malibu Road" did not cross the mouth of the wide lagoon at the Topanga Creek outfall. Instead it detoured inland around the base of the hillside. A 1921 California Highway Commission report stated that "difficulties in securing the right-of-way have [forced the abandonment of] a direct line across the mouth of Topanga Canyon and [to] adopt one less direct and more expensive to construct." Subsequent photographs will show that, because of this, motorists had to cross a wooden bridge across the creek some 300 yards from its mouth. Again referring to Photograph No. 1, a group of cars is gathered at the tip of Topanga Point, their occupants clustered in groups or bathing in the surf. Across the lagoon is a low sandbar, which explains how the cordsmen could have crossed the mouth of the Topanga Cañada while surveying the former rancho's boundaries. The photograph also shows other cars parked along the road's edge at the southwest base of the conical knoll that still sits between the present location of the Malibu Feed Bin and the Reel Inn restaurant. Their occupants appear to be setting up a tent and starting a picnic fire on the beach below a steep embankment. The only other activity is centered around what appears to be a ranch house or cabin on a sandy terrace upcoast of the knoll.[24]

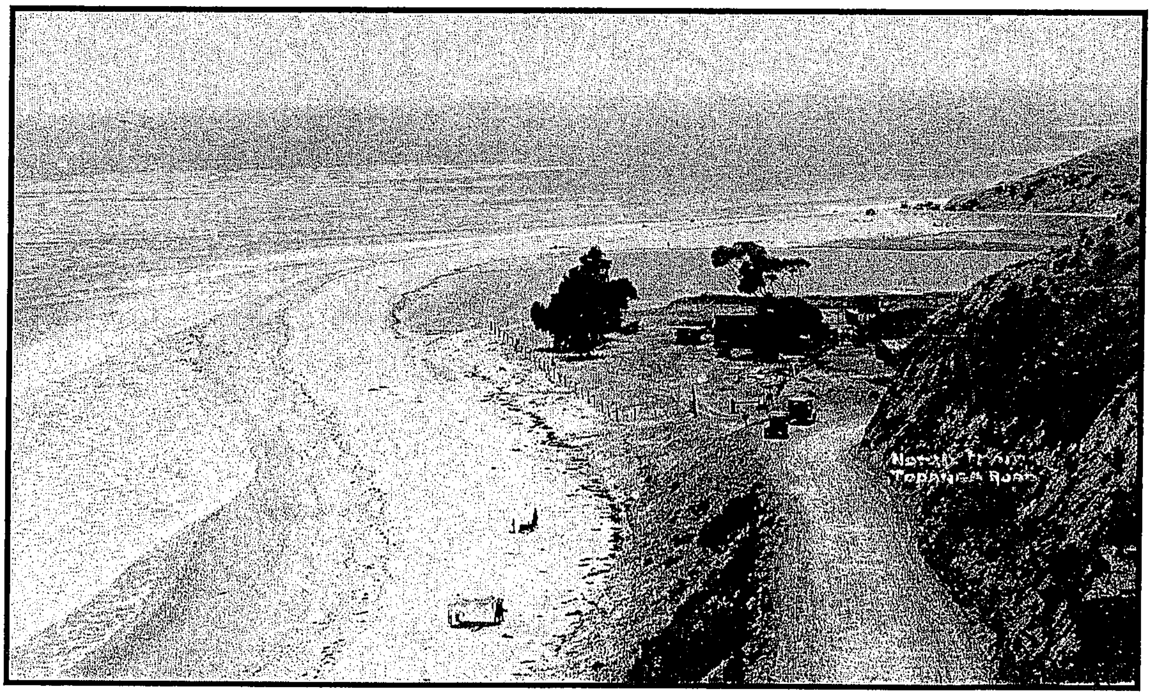
22 Leonard and Dale Pitt, *Los Angeles: A to Z*, 104and 565; Young, *Our First Century*, 120; and Young and Young, *Pacific Palisades*, 112 and 125.

23 Brunner, *Southern California's Prettiest Drive*, 8.

24 Pacific Palisades Historical Society, *West from Topanga Road*, ca. 1923; and California Highway Commission, *Preliminary Report on a Proposed State Highway VII-L.A.-60-B*, 4.

Photograph No. 1: ***West from Topanga Road*****, ca. 1923 (Source: Topanga Historical Society, Tegner Photograph Collection)**

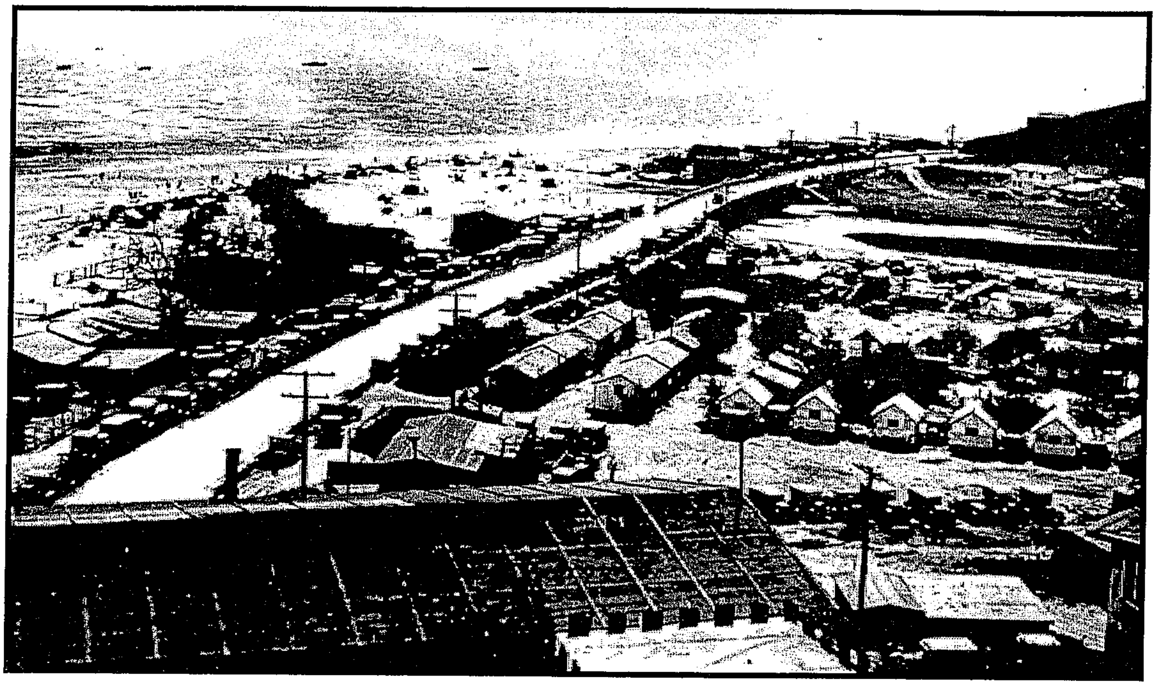




Photograph No. 2: ***Topanga Beach*****, Roosevelt Highway, ca. 1929 (Source: Topanga Historical Society, Tegner Photograph Collection)**

Photograph No. 2, taken sometime after the realignment of the Old Malibu Road in 1929 into the two-lane concrete Roosevelt Memorial Highway and bridge across the lagoon's mouth. It shows the eastern approach to the intersection of the coast highway and Topanga Canyon Road. A small building peeks out at the brush-capped knoll's southeastern base. The knoll shows signs that its southern slope has been cut back further to facilitate the widening of the new highway. At least sixty structures, peeks out at the brush-capped knoll's southeastern base. The knoll shows signs that its southern slope has been cut back further to facilitate the widening of the new highway. At least sixty structures, ranging from seaside cottages to roadside cabins, can be seen in this picture. There even appears to be a dock or fishing pier of some sort in the lower middle section of the photograph.[1]

Photograph No. 3: *1920's Vacation Tents, Topanga Creek Lagoon in Background*, ca. 1929 (Source: Topanga Historical Society—Tegner Photograph Collection)



Subsequent photographs show the extent of the development. Photograph No. 3, taken from the knoll's western slope verifies the Highway Commission's statement that "On Sundays and holidays this is one of the heaviest traveled roads in the vicinity of Los Angeles. The traffic consists mostly of automobiles on pleasure or sightseeing trips." This can be seen in the rows of parked cars lining the coast highway's shoulders approaching the new reinforced concrete Topanga Creek Bridge. The road's raised causeway now acts as a dam, preventing the lagoon from forming toward the sandbar [2]

The photograph also gives a closer look at "Tent City," a small vacation village occupying a low sandy terrace in a basin north of the Coast Road, between the knoll and the creek's outflow channel. At least _ of the former lagoon area appears to be filled in on either side of the road's raised embankment. A row of gable ended bungalows sit perpendicular to the road along the beach. Anchored off shore are pleasure craft that may belong to the local Topanga Beach Yacht Club. A large number of tents are set up along the beach's sand bar and directly in the outflow area south of the bridge (evidently at low tide).[3]

A more romantic color-tinted view of the area appears in a contemporary post card. Titled, "*Cooper's Camp, Tent City at Topanga Canyon, California*," it shows the ocean waves dangerously close to the bridge. Other enigmatic features include two spindly towers. One, north of the bridge, appears to be a

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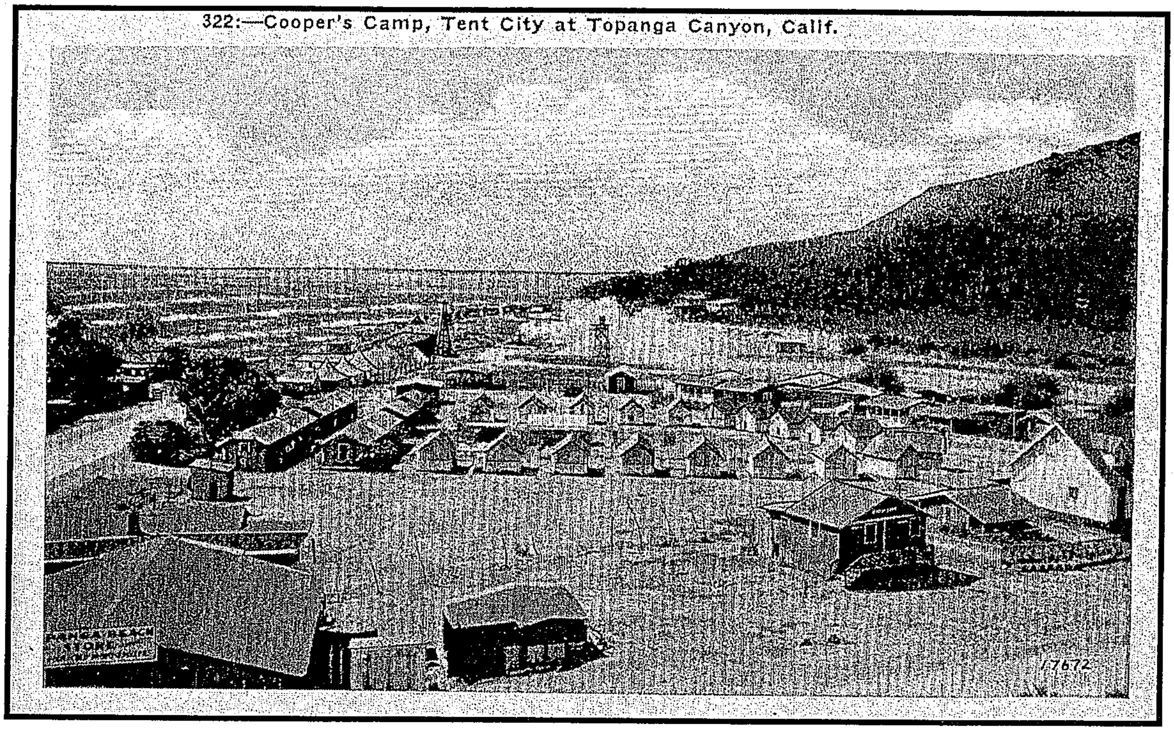
1 Ibid., *Topanga Beach, Roosevelt Highway*, ca. 1929; and "*Magnificent Highway is Formally Opened, California Highways and Public Works* (July-August 1929): 6.

2 California Highway Commission, *Preliminary Report*, 3.

3 Topanga Historical Society, *1920's Vacation Tents, Topanga Creek Lagoon in Background*, ca. 1929; and *The Palisadian*, 3 June 1932, 6.

derrick, while the other, slightly upstream, resembles either a watch or water tower. Adding to the mystery is an upright donkey engine spewing a voluminous cloud of steam that is partially obscuring Old Malibu Road. The post card also give's a clear illustration of "Cooper's Camp," its rows of clean white cabins resembling more a military base than a vacation camp. Also seen in the card's lower right-hand corner is the high, dormer gable roof of the Wood family cottage. In the card's opposite corner is the roof of the *Topanga Beach Store*, which, according to its sign, sold "cold drinks and groceries.[4]

Illustration No. 1: Cooper's Camp, Tent City at Topanga Canyon, California, ca. 1924 **(Source: Pacific Palisades Historical Society, Randy Young Collection)**



Both Cooper's Camp and the Topanga Beach Store are typical economic ventures associated with the growth of beach communities along Santa Monica Bay during the first quarter of the 20th century. It is what urban geographer Reyner Banham defines as the second phase in the development of "Surfurbia," the line of beach communities stretching from the Malibu Strip to the Balboa peninsula at Newport Beach. The first phase occurred between the early 1870s and 1920, when stagecoach, steam and electric railroad lines reached out from land-locked Los Angeles to Santa Monica and other coastal towns like Venice, Huntington and Redondo Beach. The second phase, of which the development of Lower Topanga Canyon's Tent City is a part, occurred from 1920 to 1930 and was definitely linked to the massive availability of mass-produced affordable automobiles. Post-World War I Southern Californians, including some 200,000 out-of-town visitors by 1925, now had the money and leisure time to spend on automobile touring. Most were clamoring for wider and straighter roads from urban areas out to outlying beach, mountain, and desert communities. The issuing of a state gasoline sales tax, vehicle registration and commercial weight fees allowed funds to maintain, repair, widen, and build new state highways for the more than one and a half million registered motorists.[5]

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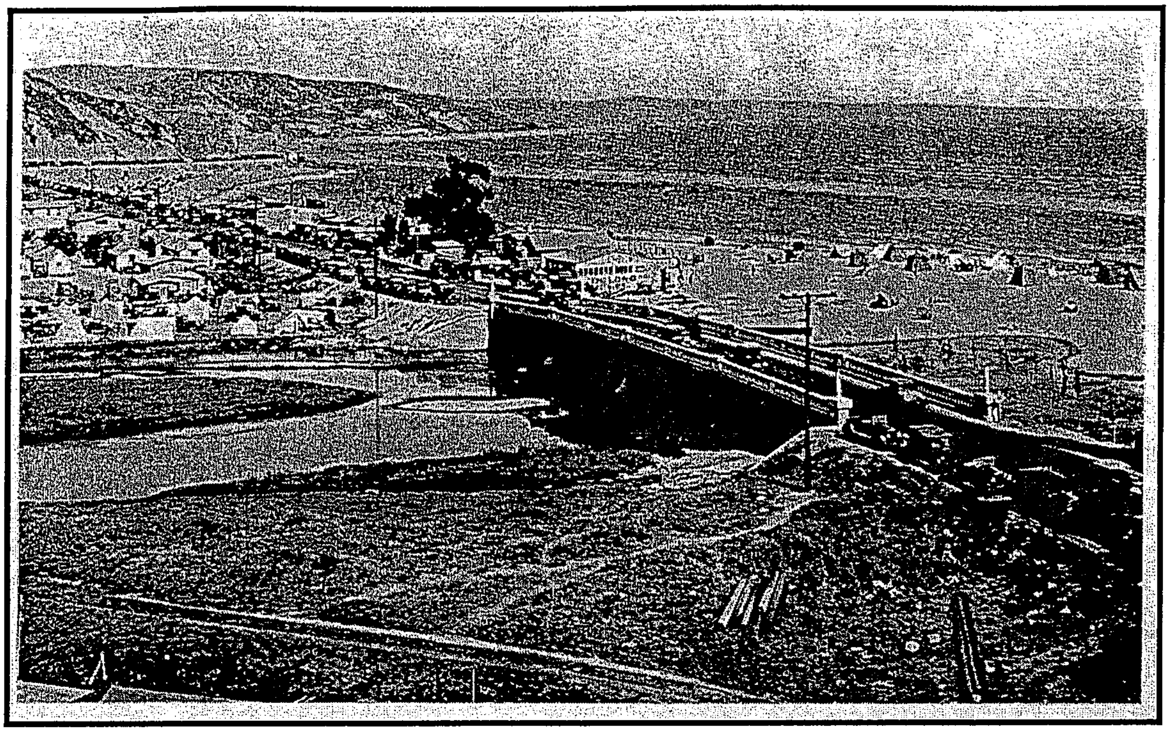
[4] Pacific Palisades Historical Society, "Cooper's Camp, Tent City at Topanga Canyon, California," ca. 1925; and George and Kathryn Wood, Letter to Virginia Haynes (10 October 2001), 1.

[5] Reyner Banham, *Los Angeles: The Architecture of Four Ecologies* (Berkeley: University of California Press, 2001), 14, 21 and 29; and Richard R. Mathison, *Three Cars in Every Garage: A Motorist's History of the Automobile and the*

Photograph No. 4: *Mouth of Topanga Canyon*, ca. 1929 (Source: Olmsted Brothers, Bartholomew and Associates, *Parks, Playgrounds and Beaches for the Los Angeles Regions*, 72)



As new and improved roads and highways spread out into suburban and exurban areas, auto camps like Cooper's began to follow suit along major touring routes. An assemblage of tents or simple cabins, they were often situated on vacant land not far from reputable businesses like the Topanga Beach Store or a gas station that could meet the needs of the auto tourist. Besides, the land or lease agreement was relatively cheap, with lower taxes and zoning restrictions than in urban areas. Strategically located near the intersection of the Coast Highway and Topanga Canyon Boulevard, the Cooper's Auto Camp could appeal to ocean bathers as well as those wishing to hike up the canyon. Besides "roughing it" in tent cabins, visitors seeking more comfort and privacy could stay in small wooden cabins. Initiated nation-wide in 1925, they featured good beds, linen sheets, kitchenettes, and indoor plumbing. Historians have equated the marriage of modestly equipped but comfortable rental cabins with automobile tourism as the birth of the motel industry in America.[6]

As the previous and following photographs reveal, Topanga Canyon Beach's Tent City was one of the most popular tourist destinations along the new Coast Highway. The long lines of cars parked along the highway's shoulders in Photographs No. 3 and 4 prove this. The broad sandy beach at Topanga Point features cabana tents along the shore, while several beach and highway-oriented businesses line the highway's eastern approach to the Topanga Creek Bridge. Photograph No. 5 gives a fisherman's

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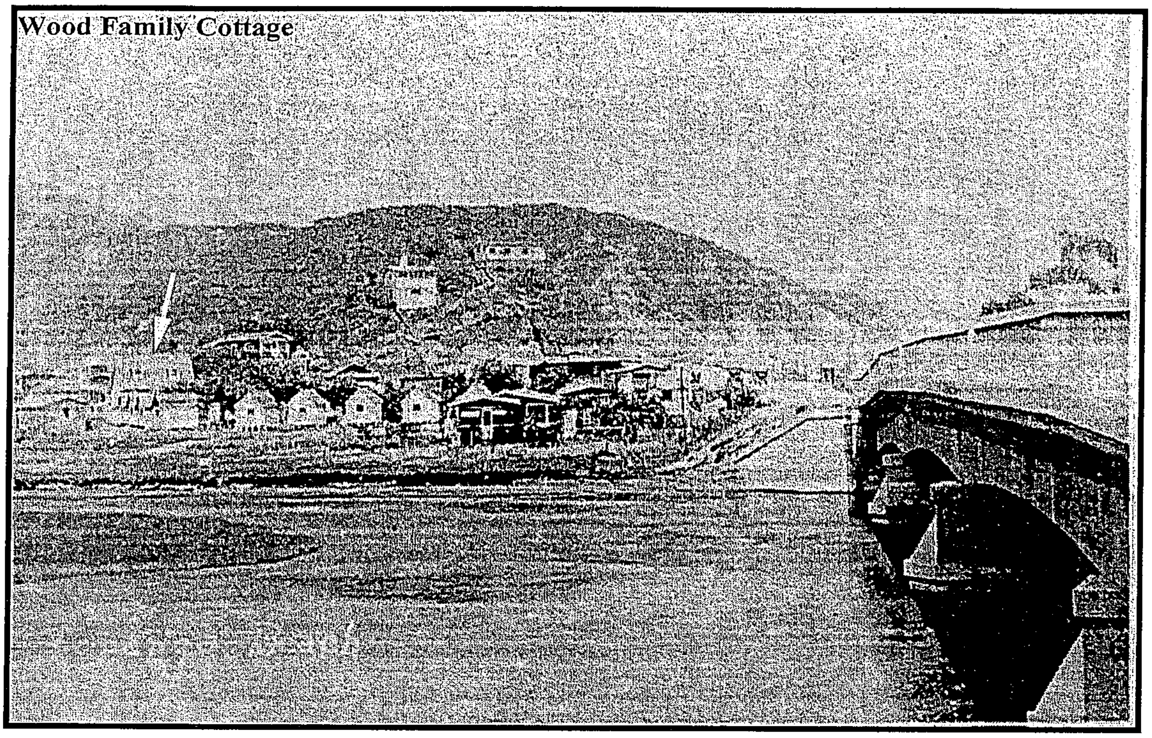
Automobile Club in Southern California (New York: Doubleday and Company, 1968), 56, 62-63, 66, 68-69, 73-74, 90 and 92.

[6] Belasco, *Americans on the Road*, 4; and John A. Jakle, Keith A. Sculle and Jefferson S. Rogers. *The Motel in America* (Baltimore and London, John Hopkins University Press, 1996), 291 and 293.

view of the bridge's reinforced concrete piers, balustrades, and abutments, as well as the tent city's dense development, which has grown up around the Wood Family Cottage.[1]

Photograph No. 5: ***Topanga Creek Passing under Roosevelt Highway*****, ca. 1929 (Source: Basten,** ***Main Street to Malibu*****, 76)**



When viewed from across the creek in Photographs 5 and 6, Topanga Beach's "Tent City" resembles a small hamlet rather than the LAAC's abortive attempt to create a yacht club and marina. Besides Cooper's Auto Camp, several closely spaced cabins and low bungalows fill the old "*enseñada*" between the creek and the knoll's base. These are substantial vacation homes, especially the Wood Family Cottage (see arrow), built on cabin sites that the LAAC leased to residents Photographs 7 and 8 also show the route of the "Old Malibu Road." Lined with split-level gable roof cabins along the creek's western banks, it crosses over the creek by means of what appears to be a wooden truss bridge. The road continues around a brush and tree-covered ridgeline to a row of cabins wrapping along the knoll's northwestern base toward the Rodeo Grounds. A familiar feature in Photographs 5-7 is the distinct high roofline of the Wood Family Cottage. Subsequent correspondence with members of the family indicates that it was relocated to its current address at 3427 Topanga Canyon Boulevard in 1932. Although relocated, it was done over 50 years ago and is one of the few surviving homes within the Lower Topanga Canyon Acquisition area that can be tied to the Tent City area.[2]

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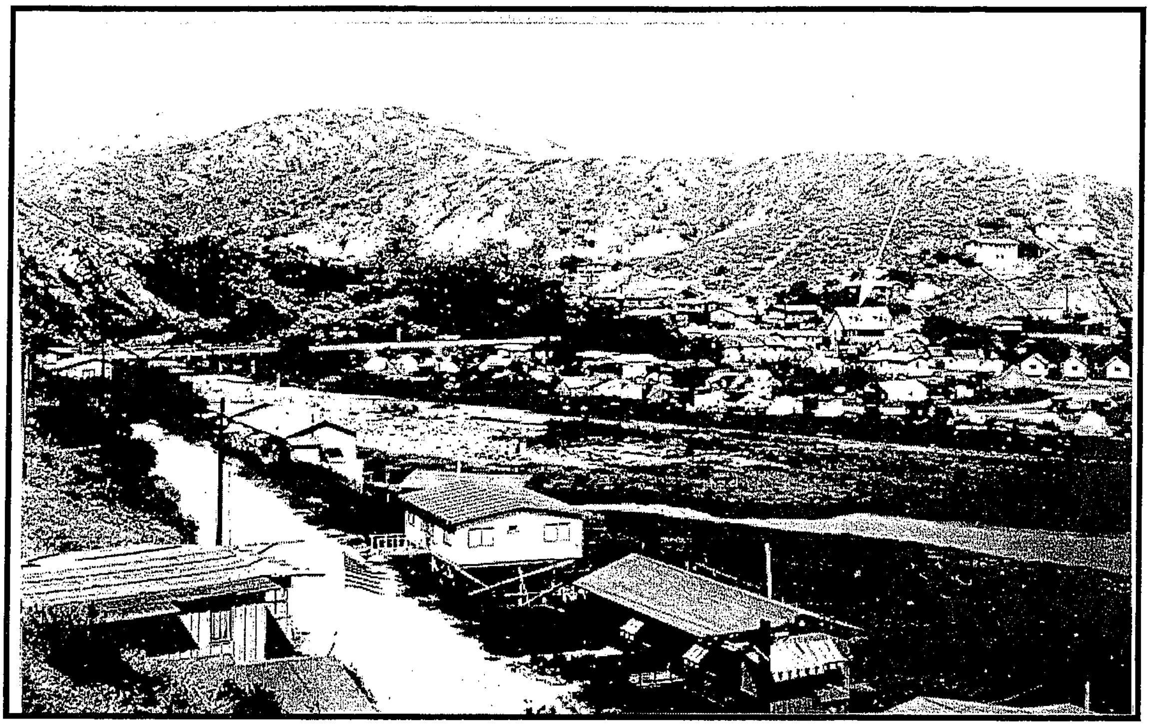
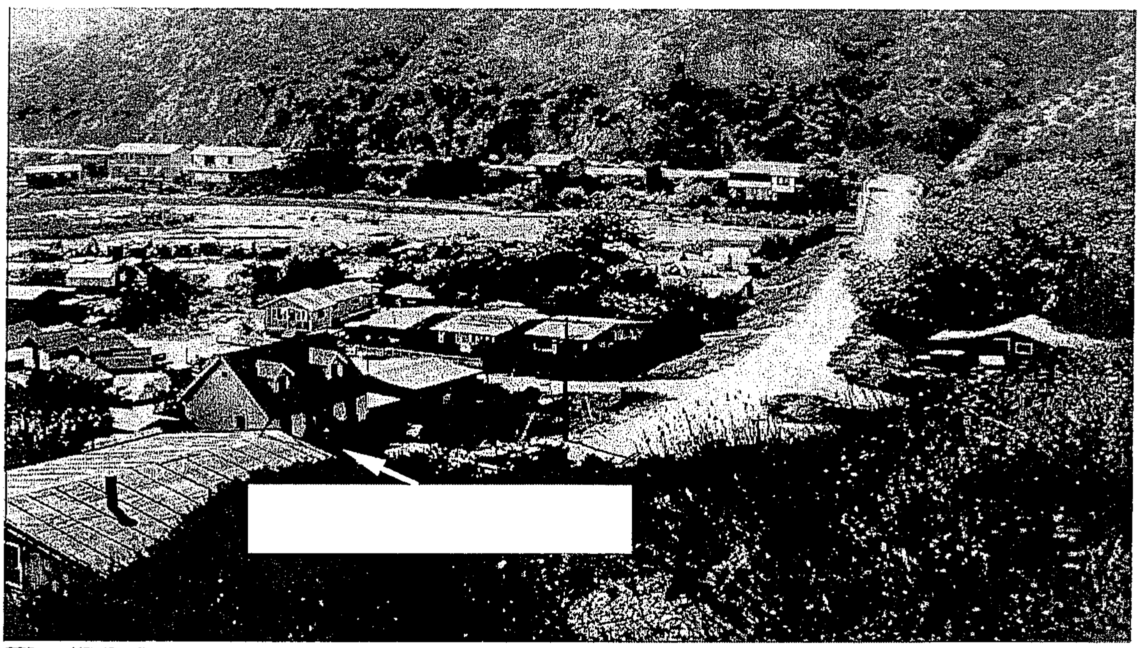
[1] Fred E. Basten, *Main Street to Malibu: All New Photographs of Celebrated Scenes and Memorabilia, Yesterday and Today* (Santa Monica: Graphic Press, 1980), 76; and Olmsted Brothers, Bartholomew and Associates, Parks, *Playgrounds and Beaches for the Los Angeles Region, A Report Submitted for the Citizens on Parks, Playgrounds, and Beaches* (Los Angeles: Authors, 1930), 72; and Topanga Historical Society, Tenger Photograph Collection, *1920s Vacation Tents, Topanga Creek Lagoon in Background,* ca. 1929.

[2] Topanga Historical Society, Tegner Photograph Collection *Lagoon, Rodeo Grounds, Sunset Mesa at Top,* ca. 1929; *Topanga Lagoon, Looking at the Old Malibu Road,* ca. 1929, *Topanga Road, Old Malibu Road, Looking at Entrance to Topanga Canon,* ca. 1929; Basten, *Main Street to Malibu,* 76; and Wood, Letter to Haynes, 1.

Photograph No. 6: ***Topanga Lagoon, Looking at Sunset Mesa in Background*****, ca. 1929 (Source: Topanga Historical Society—Tegner Photograph Collection)**



Photograph No. 7: ***Topanga Lagoon, Looking at the Old Malibu Road*****, ca. 1929 (Source: Topanga Historical Society—Tegner Photograph Collection)**

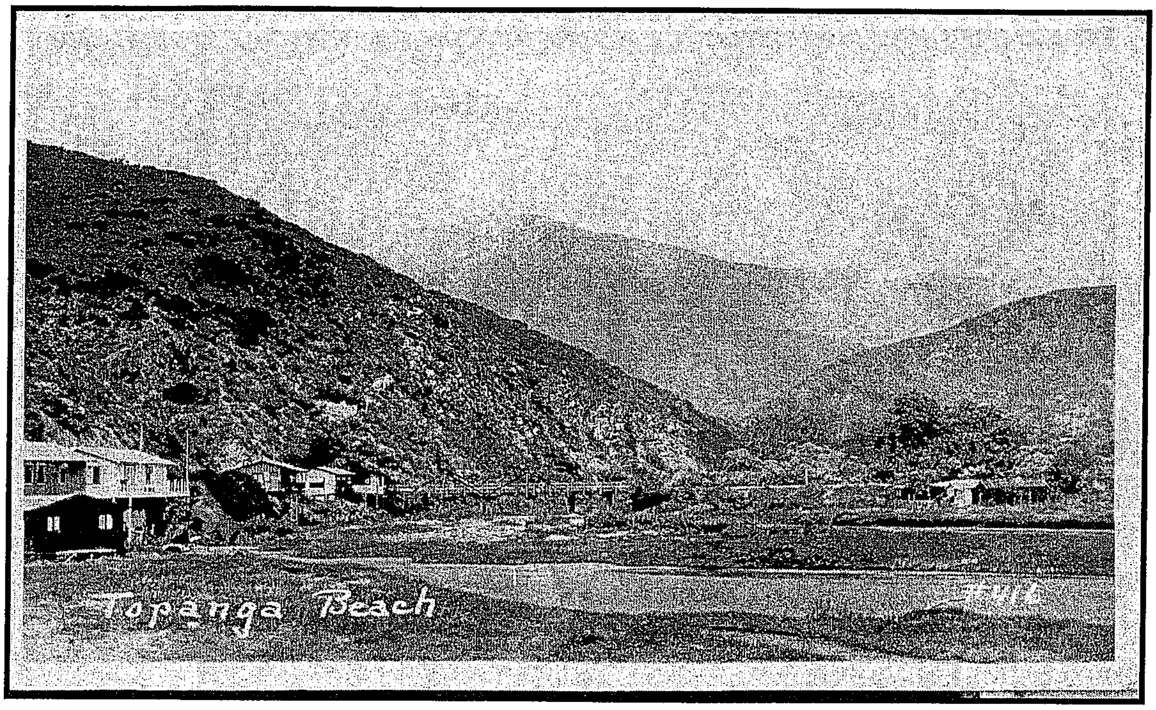


The "Modernization" of Topanga Beach and Lagoon

The reasons that forced the Woods to relocate their beach cottage in 1932, were part of the growing evolution of the Lower Topanga Canyon Acquisition's lower southwestern section. Two years earlier, in 1930, Los Angeles County spent nearly $100,000 in road improvements to Topanga Canyon Boulevard. The work, which widened the roadway and straightened out dangerous blind curves, helped to increase the flow of traffic to and from western San Fernando Valley. In doing so, however, the increased amount of traffic created a bottleneck of cars at both approaches to the Topanga Creek

Bridge. As a stopgap measure, the State Department of Public Highways widened the existing bridge and roadway in the summer of 1931. State Department of Public Highways district engineer S. V. Cortelyou explained in the local *Palisadian* newspaper that the entire length of highway between Santa Monica and Ventura County was to be improved. The project called for the road to be straightened and widened from a two-lane to an 80-foot-wide asphaltic concrete-covered four-lane highway. The work was due in part to the state's acquisition of a new right-of-way easement through a section of the nearby Malibu Ranch north of Point Dume. In addition to this area, the new alignment sought to install a safer more modern coast highway. Besides providing more travel lanes, the realignment would eliminate dangerous curves and increase the motorists' field of vision. It would also take most of the present Coast Road away from the shoreline, allowing for new residential beach development.[1]

Photograph No. 8: *Topanga Lagoon, Old Malibu Road*, ca. 1929 (Source: Topanga Historical Society—Tegner Photograph Collection)



Despite the country being in the throes of the Great Depression at this time, the Coast Road project was able to commence because of Federal public relief dollars. Initiated as part of President Franklin D. Roosevelt's New Deal Program, such programs as the Public Works Administration (PWA) and the Civil Works Administration (CWA) helped to fund and administer various public works projects throughout the nation. Besides being directly involved in such projects as the construction of public buildings, bridges, dams, and road developments, the PWA also made loans to states and municipalities for similar projects. The result was nearly $7 million for the completion of a large number of civil engineering projects, which provided jobs for thousands of unemployed skilled and unskilled workers. Augmenting the federal monies was the constantly increasing state revenues from growing automobile registration and gas tax revenues. In 1931 the State Highway Commission authorized the distribution of $962,000 in road improvement funds to Southern California. Organizations like the California State Automobile Association and the Automobile Club of Southern

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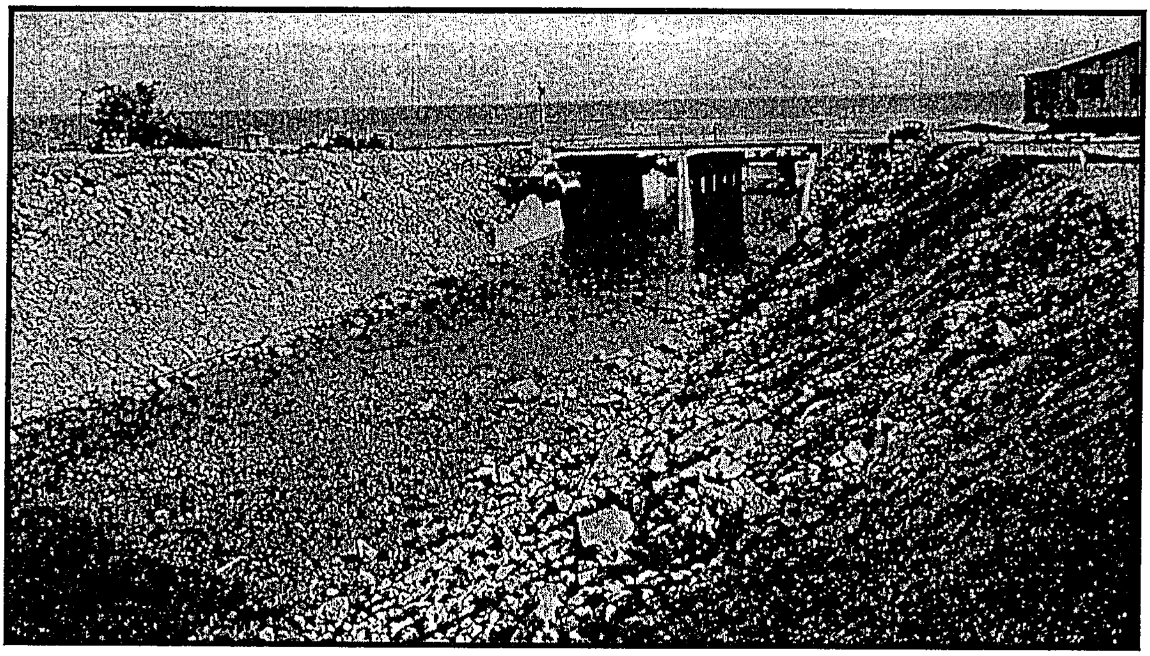
[1] Mathison, *Three Cars in Every Garage*, 153; *The Palisadian*, 12 August 1932, 1 and 25 October 1932, 3 *California Highways and Public Works*, August 1931, 23; and *Western Construction News* (10 May 1930), 233-234; *Southwest Builder and Contractor*, 12 June 1933, 11.

California had lobbied the Commission to allocate the funds for the construction of an additional 3,724 miles of new roads in Southern California. Their leaders believed that the state and the nation's economic recovery was "just around the corner," and that the new roads would stimulate the economy by providing jobs and promoting auto-oriented tourism.[2]

A major problem encountered during the Coast Road project was what to do with the spoil, the earth and rock excavated during the road's realignment and widening. Skirting the base of the mountains, it was necessary to cut back and widen a considerable portion of the precipitous cliff along the 4.1-mile section between Santa Ynez and Las Flores canyons. The heavy grading job involved the removal of an estimated 800,000 cubic yards of spoil, mostly soft and shattered sandstone and shale, with occasional conglomerate mixed with silt and clay. Averaging about 200,000 cubic yards per mile, there were few spots available along the right-of-way sufficient enough to dispose of the total yardage; and dumping it along the beaches was out of the question. Someone suggested loading it onto barges then dumping their contents out in deep water. This idea proved untenable since it would cost more than $.90 per cubic yard or $720,000 to do so. The decision was then made to deposit approximately 650,000 cubic yards of spoil in the basin or lagoon at the Topanga Creek outlet. This would reduce the price for hauling and dumping the road spoil to around $.25 a cubic yard.[3]

Photograph No. 9: ***New Bridge over Topanga Creek*****, 1933 (Source:** ***Southwest Builder and Contractor*****, 12 June 1933, 12)**



Begun in February 1933, the Topanga Creek fill was the largest in point of area and yardage made in connection with Coast Highway construction project between Santa Ynez and Las Flores canyons. A fleet of 30 heavy-duty dump trucks dropped between 5-7 cubic yards of rock and soil, while bulldozers spread the material in 8-inch layers. Laborers then watered and rolled the area to have the fill conform to then standard state highway specifications. The State Highway Department operated a soil laboratory on

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[2] *California Highways and Public Works*, August 1931, 23; *Southwest Builder and Contractor* (12 June 1933): 11; Mathison, *Three Cars in Every Garage*, 105, 153, 163 and 165; and Margaret Bing, *A Brief Overview of the WPA* (Bienes Center for the Literary Arts, http://www.co.broward.fl.us/lii10204.htm).

[3] California Highway Commission, *Preliminary Report on a Proposed State Highway VII-L.A.-60-B*, 4; *Southwest Builder and Contractor*, 12 June 1933, 11.

site to test for proper compaction. Completed in August 1933, the area adjacent to the highway's north shoulder had been raised some 8-10 feet.[4]

Another major alteration to the area was the replacement of the recently widened bridge across Topanga Creek. The new, shorter 79-foot long reinforced concrete bridge's span was reduced from four to two channels (see Photograph No. 9). The California Division of Highway's designers wanted a narrower span to produce a high velocity waterway "adequate enough to carry the flood waters that rush down from the Topanga watershed in the mountains at periods in the rainy season." An interesting feature included a pedestrian sidewalk cantilevered out from the east abutment, which allowed pedestrians to pass under the highway.[5]

Concurrent with the improvements done to the Coast Highway, extensive improvements were being done to the connecting Topanga Canyon Boulevard. Between 1930 and 1933, Los Angeles County had spent nearly $100,000 on road widening and realignment. On September 5, 1933, the County Board of Supervisors approved the reclassification of the road from a county to Secondary State Highway, Route 27.[6]

As all this work was going on, the owner and operators of the businesses and cabins along Roosevelt Memorial Highway, between Topanga Canyon Boulevard and the new bridge, were given the opportunity to remain in the area. The State Division of Highways agreed to "preserve the buildings and place them on new foundations on the completed fill." For example, the current owner of the auto camp, C. F. Whitney, filed a building permit to "Alter [an] Auto Camp, [at] Roosevelt Highway and Topanga Canyon." Careful comparison of the pre-1933 photograph with those taken ca. 1938 and 1940 suggest that Whitney recycled a good number of the camp's small wood-frame cabins on the new site.[7]

Renamed the *Topanga Beach Auto Court*, it featured a new, more symmetrical arrangement of the cabins along a triangular inner courtyard. Although it has experienced some degree of alteration over the years, the current *Topanga Ranch Motel* still embodies the distinctive characteristics of a type, period and style of vernacular American architecture—the locally owned and operated tourist automobile court motel of the early 1930s. Its use of small cabins arranged around an intimate courtyard reflects the transitional period of roadside American motel evolution between the sprawling autocamp and the more formal nationally franchised motor court. During the Depression, many automobile travelers chose to take short weekend runs to local beaches or mountain areas like Topanga Beach and Canyon. To save money, they often stayed at low-cost "cottage camps" instead of more expensive hotels. The proprietors often upgraded the facilities to suit the tastes of these fastidious and economy-seeking travelers. Historian Warren James Belasco credits this in part, "to the skill and ambition of roadside entrepreneurs." "But," he continues, "the main responsibility lay with the middle-class market they pursued." As anti-modern gypsies, these tourists wanted simplicity, self-sufficiency, and comradeship. As modern consumers, they valued comfort, service, and security. Small cabins like those at the Topanga Beach Auto Court often reduced tensions involved in family motoring. The clean beach and nearby mountain trails were a happy medium between "roughing it" in

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4 *Southwest Builder and Contractor*, 12 June 1933, 11-12.

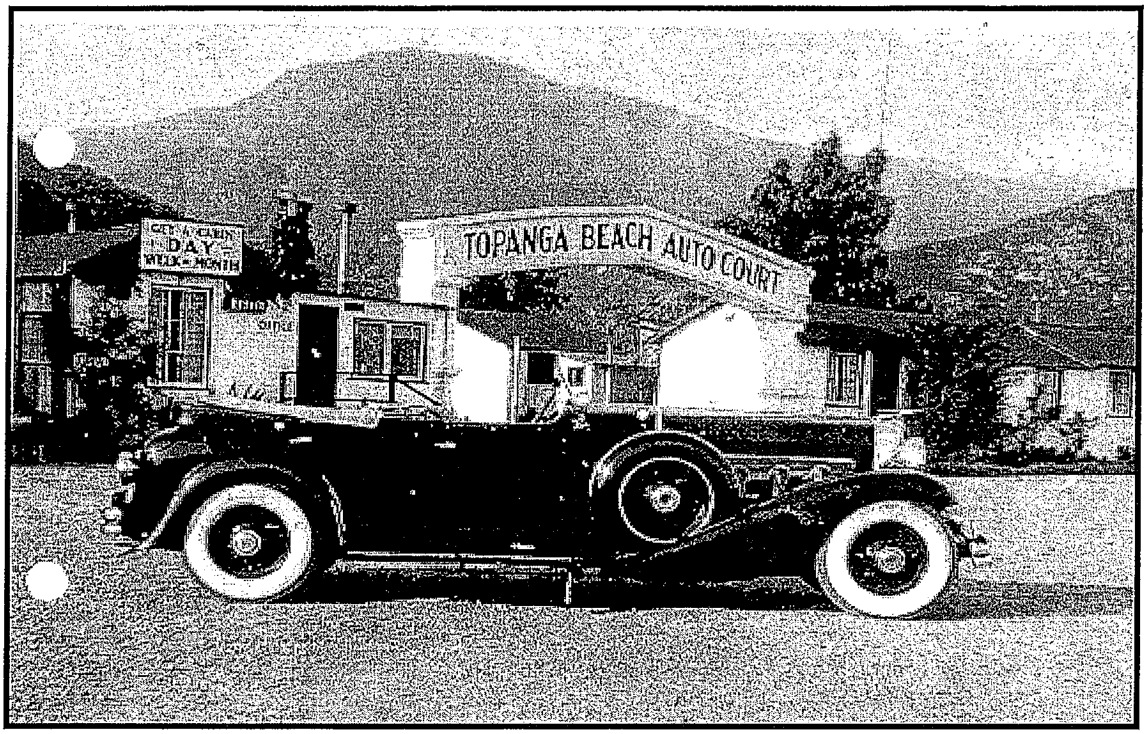
5 Ibid.; and California State Division of Highways, *Bridge Report, Bridge No. 53-35, Topanga Creek* (7 February 1940), 1.

6 Los Angeles County Board of Supervisors, *In Re State Secondary Highway System: Resolution Approving List of Highways in Los Angeles County Taken over by California Highway Commission for Maintenance and Construction* (Los Angeles: County of Los Angeles, 5 September 1933), 1; and K. D. Lewis and Robert W. Akin, "*Topanga Canyon: Major Reconstruction Project on Sign Route 27 Is Completed*" (July/August 1956), 23.

7 Ibid., 11; and "*L. A. County Building Permits,*" No. 780, 30 June 1933, n.p.; and USGS Topographic Map, *Topanga*, 1928, 1932, and 1952.

the country, and at the same time sleeping in something more comfortable and secure than a flimsy canvas tent. The open court also had its appeal, offering guests the convenience of being able to park their cars next to their cabin. As seen in Photograph No. 10, the auto court appealed to the up-scale Pierce Arrow as well as the Chevy and Ford-driving motorists.[1]

Photograph No. 10. ***Topanga Beach Auto Court*****, ca. 1938 (Source: Topanga Historical Society)**



During the late 1930s, as the nation slowly recovered from the Depression, an increasing number of out-of-state auto-tourists regarded Southern California, as well as Florida and Texas, as vacation destinations. Many continued to stay at roadside auto courts, but now convenience, not especially price, was their main concern. To stay ahead, local owner/operators invested in hotel-class equipment like indoor plumbing, sturdier construction, spring mattresses, separate kitchenettes with gas ranges, refrigerators, and dinette sets. In fact, motor court cabin-building and upgrading was, according to Belasco, "one of the bright spots in an otherwise disastrous period for the [American] construction industry." The success of the refurbished and updated auto court or "motor hotel" seemed to prove that the American entrepreneur system still worked, and confirmed the automobile's place in the center of Southern California life. Yet, after World War II, the small-scale "mom-and-pop" auto court operators could no longer compete with larger regional or nation-wide "motel" chains. Surprisingly, the Topanga Ranch Motel has been able to survive. Due in part to its quaint, "retro" look, the motel has been used as an attractive location for Hollywood film and television productions.[2]

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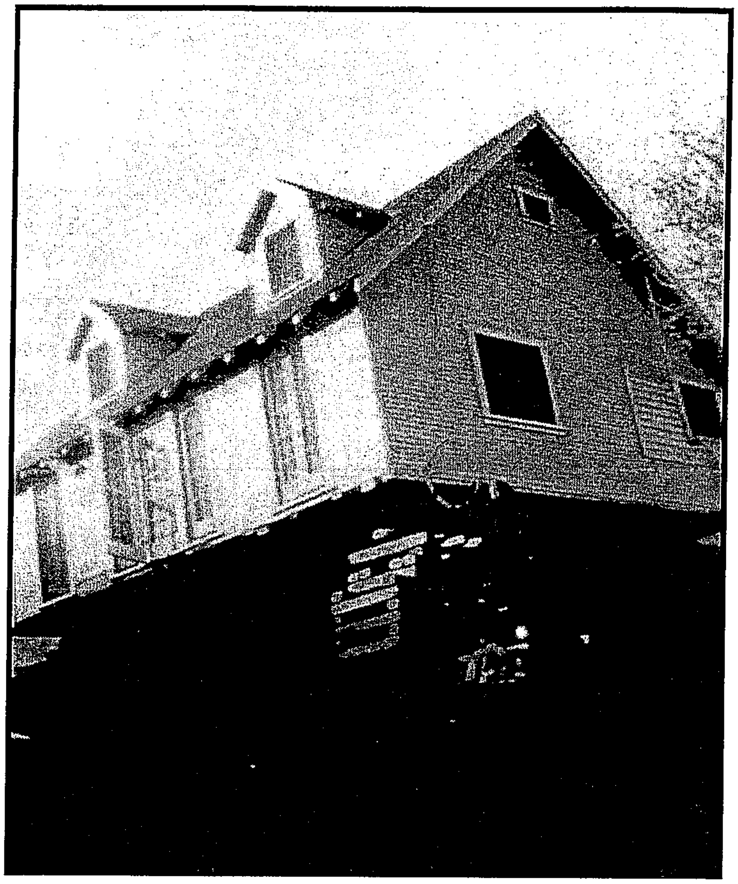
[1] Belasco, Americans on the Road, 4-5 and 143; and Topanga Historical Society, "Topanga Beach Auto Court, ca. 1938.
[2] Ibid., 143-145, 156 and 164; Virginia Haynes, *Interview with Author* (01 October 2001); and Ray Craig, Interview with Author (18 September 2001).



Contemporary permit data in the Southwest Builder and Contractor suggests that others may have relocated out of the former tent city. In June 1933, Frank J. Longo filed for a permit to repair a 26 x 28 2-story, composition-roofed frame dwelling at No. 8 Roosevelt Highway. Unfortunately, unless Longo or his descendents can be located, there is no way to cross-reference the building's 1933 address with the existing buildings along Pacific Coast Highway.[3]

Photograph No. 11. *Wood Family Cottage*, 1932 (Source: George and Kathryn Wood)

Besides the cabins at the current Topanga Ranch Motel, the only other surviving building from the lower basin that has remained relatively unchanged since its move is the *Wood Family Cottage*. A vintage photograph obtained by members of the surviving Wood family show it after it was raised on wood timber cribs prior to its being transported from the tent city to its present location at 3427 Topanga Canyon Boulevard in 1932 (See Photograph No. 11).

The building is also significant architecturally. Again using the 1932 photograph for comparison, the small, 1 _ -story cottage is relatively unchanged, and is an excellent example of an early 20th century Cape Cod style vacation cottage. Recognized as a unique vernacular American house type for over 200 years, it was a highly popular carpenter/contractor-built home during the 1920s, surviving well into 1960's suburbia[4]

The period between 1933 and 1940 was a time of dynamic flux for the Lower Topanga Canyon Acquisition area. A number of early cottages around the perimeter of the former lower basin have either remained in place or have been relocated along Old Malibu Road. A number of permits have been located that indicate several new dwellings were also built outside the basin between May and June 1933. For example, J. R. Hunt filed a permit to erect a 26-x-28 frame dwelling on Roosevelt Highway. Likewise Elsie Yoes filed a permit to build a 15-x-30 dwelling on Rodeo Road at "Cabin Site No. 47." And Betty M. King hired a contractor to build a single-story frame dwelling for herself at 39 Topango [sic] Lane. However, it is difficult to determine if these buildings are still standing, because there is no way to corroborate their original locations with current addresses..[5]

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[3] *Southwest Builder and Contractor*, *"L. A. County Building Permits,"* No. 669 (23 June 1933), n.p. and No. 745 (30 June 1933), 55.

[4] George and Kathryn Wood, *Letter to Virginia Haynes*, 1; Maurie Van Buren, *House Styles at a Glance: An Illustrated Guide* (Atlanta: Longstreet Press, 1991), 14;. Herbert Gottfried and Jan Jennings, *American Vernacular Design, 1870-1940* (Ames: Iowa State University Press, 1988), 192; and National Park Service, *National Register Bulletin No. 15*, 2 and 41.

[5] *Southwest Builder and Contractor*, Los Angels County Building Permits, No. 313, 26, May 1933, n..p.; 669, 30 June 1933, 54.

Besides the removal of the tent city, the most dramatic event to occur at Topanga Beach was the first of a series of disastrous fires. The first, reported on November 23, 1938, started on the Trippet Ranch and fed by strong winds, roared down Topanga Canyon to the beach in 45 minutes. The ensuing four-day brush fire destroyed many homes and cabins in its path. Local historian Louise York estimates that as many as 118 homes and garages at the canyon's mouth were destroyed. Evidence of the fire's destruction can still be seen in the charred remains of several abandoned cabin sites in the study area.[6]

Postwar Change

The study area remained relatively in stasis during World War II. The only event of note was the transfer of ownership of the beach frontage in 1944 to LAAC by its then owner, William Randolph Hearst. Hearst, who had previously bought the tract from its original owner, Robert Gillis, had divided the tract into 5-year tent or cabin leases on 50 beach sites. Cancelable on 90 days notice, the leases applied to approximately 125 homes built along the beach between 1941 and 1956. During the war, ground rental fees were $15 a month, raised to $17.50 and later to $50.[7]

In response to an increase in automobile traffic during the postwar period, between 1955 and 1956 a three-mile section of Topanga Canyon Boulevard 3.6 miles north of PCH was graded and paved. This created a uniform standard of alignment and width along the entire route from Woodland Hills to the beach. The underlying purpose was to provide a safer route for what was described as "an exodus of people from the San Fernando Valley to the beach." A new generation of visitors and residents began to filter into the Lower Topanga Canyon Acquisition area. Among these were retirees and members of the ever-expanding Hollywood movie colony that had been coming to the Malibu/Topanga area since the 1920s. Long-range commuters between the valley, Santa Monica and Culver City were also attracted to the area's rustic seclusion. Instead of small, rustic vacation cabins, they built what has been described as "more conventional and permanent homes." Over time, the residential community has developed into a "rural and informal—even bohemian lifestyle." Critics have also described the area as possessing homes that are "in fair to poor condition, evidencing accrued depreciation." Until recently, LAACO (Its corporate logo was changed in 1975) had many of these "dilapidated" structures torn down.[8]

During the postwar years, 1947 to 1960, several new leaseholders began to build small commercial buildings along Pacific Coast Highway (The name Roosevelt Memorial Highway had been out of use by then). The oldest of these, *Wylie's Bait Shop*, was established in 1947 by Willis B. and Ruth B. Wylie. The Wylies were well-known local business people who were instrumental in developing and promoting sports fishing in Santa Monica Bay. Still highly regarded among the area's sports fishing aficionados, the Wylies' daughter still runs the business, reportedly one of the oldest continuously owned and operated family-run businesses in the Malibu/Lower Topanga coastline area.[9]

The design of the new businesses that came to the area reflected the simple, yet functional geometric abstract modernism of the time. Large raking roofs with wide overhangs, multi-paned front sales areas, and prominent roof-mounted signs meant to capture the attention passing drivers were all typical roadside commercial design features from the late 1940s to the mid-1960s. Some of these elements

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[6] *California: A Guide to the Golden State*, 416; and York, *The Topanga Story*, 149-150.

[7] Young, *Our First Century*, 149.

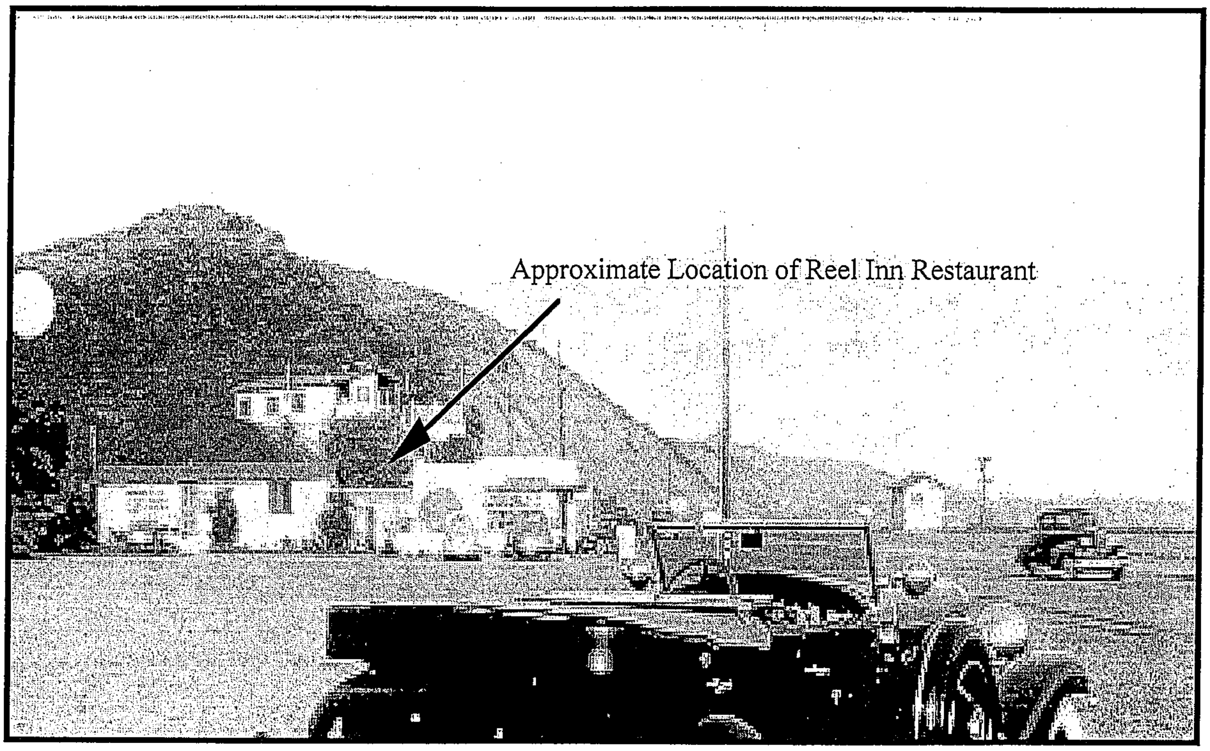
[8] Lewis and Akin, "*Topanga Canyon*," 23-24; Leonard and Dale Pitt, *Los Angeles: A to Z*, 313-314 and 505; Mason and Mason, *Appraisal Report*, 22; and Young, *Our First Century*, 157.

[9] Haynes, *Interview with Author*.

can still be seen in two of the commercial buildings along PCH. However, they have been nearly buried under subsequent remodeling and no longer maintain their historic integrity.[10]

Another popular postwar commercial design used on a commercial building along PCH was the so-called Polynesian-influenced *Kon-Tiki* Tropical style. This was reportedly the style used on *The Raft*, a popular roadhouse allegedly frequented by "bad boy" movie actor Lee Marvin. Local informants report that the Raft was housed in a converted residence, east of a gas station (See Photograph No. 12). It was allegedly damaged during a kitchen fire and rebuilt prior to its reopening as the *Reel Inn* in 1985.[11]

Photograph No. 12. *Topanga Beach Auto Court, Looking South along Coast Highway*, ca. 1938 (Source: Topanga Historical Society)

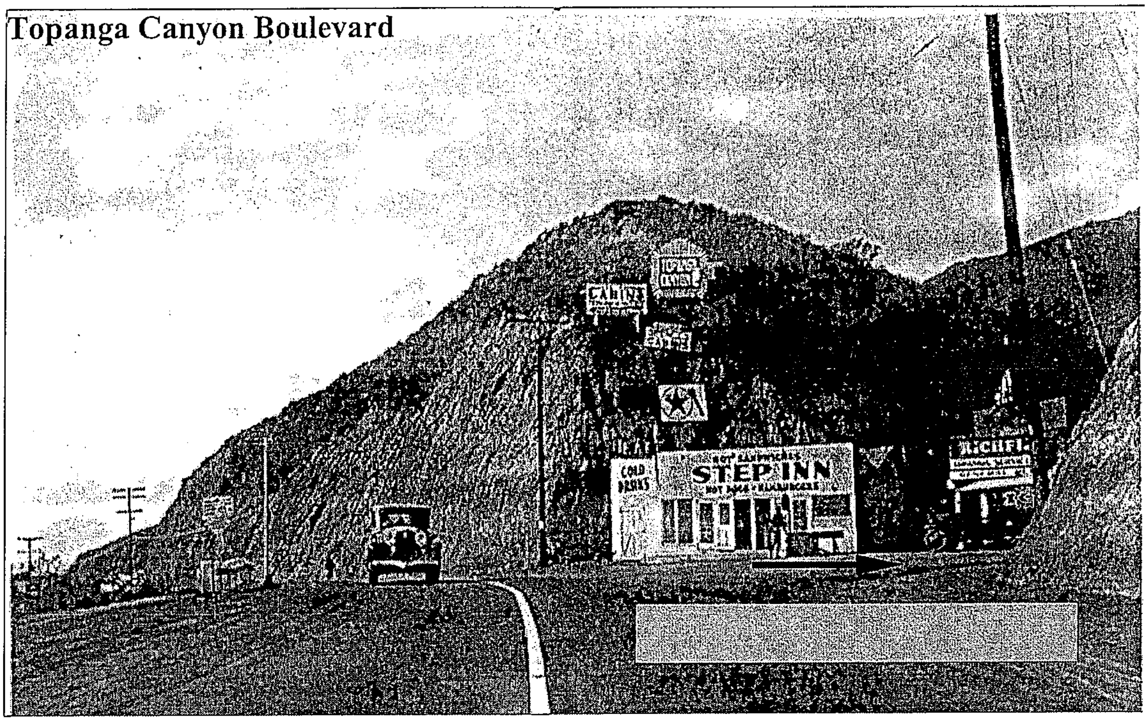


Another significant change in the Lower Topanga Canyon Acquisition area's built environment that occurred during the postwar period was the removal and alteration of several pre-World War II-era buildings on the northwest corner of Topanga Canyon Boulevard and PCH. Currently occupying the site are the *Malibu Feed Bin* and the *Oasis Furniture* sales yard. The former dates back to 1966, and is composed of two earlier commercial buildings, a 1919-era fire station, which later became LAAC's Topanga Canyon Acquisition office, and *Potter's Trading Post,* dating to 1931. At the time of its 1966 takeover, two walls joined the two buildings. The current tenant completed the process by completely enclosing the space between the two buildings. Besides the LAAC office and store, there were other commercial businesses on the site. A 1933 photograph of the intersection (See Photograph No. 13)

[10] Chester H. Liebs, *Main Street to Miracle Mile: American Roadside Architecture* (Baltimore: The John Hopkins University Press, 1995), 39 and 62.
[11] Haynes, *Interview with Author*; Andrew Leonard, "*Telephone Interview with Author*," 24 January 2002; Banham, *Architecture of Four Ecologies*, 104-106; Rachel Carley, *The Visual Dictionary of American Domestic Architecture* (New York: Henry Holt and Company, 1994), 239; and Topanga Historical Society-Tegner Photograph Collection, *Topanga Beach Auto Court, Looking South along Coast Highway*, ca. 1938.

shows the Step Inn café and a Richfield gas station and grocery store. In addition to these was a large mechanical ice-making machine that reportedly sold block ice to be placed in the Auto Camp resident's iceboxes. [1]

Photograph No. 13. ***Station "179" Looking North, Road VII-L.A.-60-B, February 1st, 1933, Before Construction of Work Began*, (Source: California Division of Highways)**



Other changes to the Lower Topanga Canyon Acquisition area occurred during the postwar period. In 1957 LAAC sold off a 80-acre parcel of undeveloped hillside between the intersection of PCH and Topanga Canyon Boulevard to Surfview Drive. Known originally as Sunset Mesa, the parcel was subdivided into the Parker Mesa residential tract. Eight years later, the State of California announced that it was interested in purchasing the entire mile-long stretch of Topanga Beach between Parker Mesa and Topanga Creek, as part of a future state park. After the state purchased the property in 1973, the tenants occupying the houses along the shore were forced to move out under the terms of the sale. The state, which removed the houses soon after, operated the area as Topanga State Beach, until relinquishing operation to Los Angeles County.[2]

Concurrent with the creation of Topanga State Beach was the state's creation of Topanga State Park north of the study area on July 1, 1973. Originally part of Francisco Sepúlveda's historic San Vicente y Santa Monica Rancho, by the 1980s the park had grown to some 9,000 acres. In August of 2001, the State of California completed negotiations with LAACO to acquire the remainder of their land in Lower Topanga and annex it to the larger Topanga State Park. By doing so, it was able to acquire a

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[1] Susan Chasen, "Malibu Feed Bin: Going, Going...," *Topanga Messenger* (May 3-16, 2001), 1-9; Marty Morehart, *Interview with Author*, 30 January 1930, and *Final Report for the Construction of a Primary State Highway from Los Flores Canyon to the Los Angeles City Limits in the County of Los Angeles—STA. 1069+00 SEC. A to STA. 220+00 SEC. B, Contract No. 47VC13, Road VII-L. A.-60-A-B, 4.17 Miles*, 16 December 1933.

[2] Young, Our First Century, 149; and York, The Topanga Story, 125.

unique ecological resource, creating an opportunity to extend the park from the mountains to the ocean.[3]

CONCLUSION

In spite of dating back to California's historic Spanish and Mexican Rancho periods, the Lower Topanga Canyon Acquisition's built landscape dates back to relatively modern times. Constructed roughly between 1925 and 1980, it is concentrated in the lower southwestern section of the acquisition, with scattered sites following Topanga Creek and Topanga Canyon Boulevard a mile or so north of Pacific Coast Highway. Within the built landscape, the Topanga Ranch Motel, the Wood Family Cottage, and Wylie's Bait Shop are representative examples of the area's period of historic growth and development during the area's period of historic significance, 1915 to 1952. Because they have retained their historic integrity, they are potentially eligible for the National Register. Unfortunately the remaining structures and sites have lost their historic integrity either through inappropriate remodeling and/or repairs to both their structure and setting, or by not being old enough to be eligible for the National Register of Historic Places.[4] Overall, the Lower Topanga Canyon Acquisition area's built environment is a piecemeal agglomeration of unrelated parts. Because of this, it fails to convey its association with its potential historical significance, thereby reducing their eligibility, as qualified historical resources.

PRELIMINARY INVENTORY AND EVALUATIONS

This section of the report provides preliminary data on the historic resources located within the Lower Topanga Canyon Acquisition study area. It additionally lists those buildings and sites that are considered to be non-historic and therefore non-contributing.

Eligibility Criteria

California State Parks recognizes historic cultural resources based on their eligibility or potential eligibility for the National Register of Historic Places (NRHP) and/or the recently established California Register of Historical Resources (CRHR). Historic and architectural significance is determined by applying the criteria of the National Register of Historic Places as defined by the NHRP guidelines outlined in National Park Service (NPS) Bulletin 15. (The CRHR Regulations are based on these criteria.) A resource may qualify for the NHRP if the building or site is 50 years or older and significant within a historic context, meets the eligibility criteria, and retains integrity.

As such, the significance of a historic property can be judged and explained only when it is evaluated within its historic context. Historic contexts are those patterns, themes, or trends in history by which a specific occurrence, property, or site is understood and its meaning made clear." In order to be eligible for the NRHP when evaluated within its historic context, a property must be demonstrated to be significant under one or more of the following criteria:[5]

A: Associated with an event, or series of events that have made a significant contribution to the broad patterns of history. (Events)

[3] York, *The Topanga Story*, 122-125.
[4] National Park Service, *National Register Bulletin No. 15*, 2 and 41.
[5] Ibid., 12-21.

B: Has an unequivocal association with the lives of people significant in the past. (People)

C: Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction. (Architecture)

D: Has yielded or may be likely to yield information important to history or prehistory. (Archaeology)

An additional requirement for the National Register is the retention of integrity or "the ability of a property to convey its significance." Assessment of integrity includes seven criteria which are: location, design, setting, materials, workmanship, feeling, and association. NRHP and CRHR eligibility is determined by evaluating the above components of context, criteria, and integrity.

LIST OF HISTORIC BUILDINGS AND THEIR SIGNIFICANCE

Topanga Ranch Motel

Location and Description:
18717 Pacific Coast Highway

Originally named the "Topanga Beach Auto Court," it is a grouping of some 23 detached small wood frame cabins, as well as a barn, storage shed, and a stationary automobile travel trailer arranged in a modified D-shaped plan.

Significance:
The *Topanga Ranch Motel* is potentially significant under Criterion A. It is associated with the development and evolution of automobile-oriented roadside recreational activities in the Lower Topanga Canyon/Southeastern Malibu area during the mid-to-late 1930s and mid-1950s. Its overall design, layout and use of building materials also make it potentially significant under Criterion C. Originally known as the *Topanga Beach Auto Court*, it is a local representation of a locally owned and operated tourist court. Its use of intimate cabins arranged around a courtyard reflected a transitional phase in motel development between the earlier sprawling autocamp to the more formal nationally franchised motor court. Erected sometime after 1933, it sits above the filled-in site of the earlier *Cooper's Autocamp.* A 1920s-era tourist camp, the latter consisted of a number tent cabins, cabins, and cottages originally located north of and below what is now Pacific Coast Highway (PCH) on a slight rise between the Topanga Creek Lagoon and a large conical knoll. The 1933 widening of the Roosevelt Memorial Highway (PCH), and the replacement concrete bridge over the now filled-in lagoon mouth necessitated the camp's relocation. Historic photographs and public records indicate that several of the autocamp's cabins were utilized in the construction of the Topanga Beach Auto Court. During its period of historic significance, ca. 1933-1952, the motel was one of a number of highway-oriented commercial enterprises in the immediate area, which included a market, gas station, and restaurant. It was also convenient to those wishing to stay overnight while recreating at the nearby Topanga Beach. In recent times, Hollywood film and television production companies have frequently used the motel for location work.

Integrity:
Despite certain alterations, the motel has kept its overall integrity of location, design, setting, feeling, and association with the development and evolution of automobile-oriented roadside recreational activities in the Lower Topanga Canyon/Southeastern Malibu area during the mid-to-late 1930s and mid-1950s.

Wood Family Cottage

Location and Description:
3427 Topanga Canyon Blvd

This detached 1 _ -story clapboard-sided Cape Cod style residential cottage is located on a level pad slightly below Topanga Canyon Boulevard's western right-of-way. The high pitch roof features projecting eaves covered by fascia boards on the gable end and projecting rafter tails. Other character-defining features include front-gabled roof dormers and an exterior brick chimney. There is also a detached gable-end, clapboard-sided garage associated with the site.

Significance:
The Wood Family Cottage is potentially significant under Criterion A. Beside some of the cabins at the current Topanga Ranch Motel, the Wood Family Cottage is the only other surviving building that is directly associated with the former Topanga Beach Tent City. It is also potentially significant under Criterion C. It is an excellent example of an early 20th century Cape Cod style vacation cottage. Recognized as a unique vernacular American house type for over 200 years, it was a highly popular carpenter/contractor-built home during the 1920s, surviving well into 1960's suburbia. Finally, it is potentially significant under Criteria B, a property moved from its original and/or historically significant location.[6]

Integrity:
Despite the move, which did occur during the building's period of historic significance (ca. 1925-1953), the cottage has maintained, according to *National Register Bulletin 15*, "enough historic features to convey its architectural values and retain integrity of design, materials, workmanship, feeling and association."[7]

Wylie's Bait Shop

Location and Description:
18757 Pacific Coast Highway

This detached 303-sq. ft. wood-frame-construction, rectangular commercial building's vernacular handyman-built appearance appears to have been built using whatever flotsam and jetsam happened to wash ashore at Topanga Beach. Underneath this façade, the building's overall shape, wood siding and shed-roof are typical of the type of functional, vernacular, Modern utilitarian buildings commonly built during the postwar period.

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[6] Van Buren, *House Styles at a Glance*, 14; Virginia and Lee McAlester, *A Field Guide to American Houses* (New York: Alfred A. Knopf, 1989), 324 and 339; and *National Register Bulletin No. 15*, 29.
[7] *National Register Bulletin No. 15*, 29.

Significance:
Wylie's Bait Shop is historically significant under Criterion A. Opened in 1947, it is one of the first commercial operations established in the immediate area during the postwar era. It is also one of the oldest continuously owned and operated family-run businesses in the Lower Topanga/Malibu coastline area, which would also make it potentially significant under Criterion B. Its founders, Willis B. and Ruth B. Wylie were well-known local business people who were instrumental in developing and promoting local sports fishing. The Wylies' daughter continues to operate the business, which is highly regarded among the area's sports fishing aficionados.

Integrity:
Reportedly done sometime during the late 1960s or 1970s, alterations include expansion of the front sales area out toward the highway, and wood and tile embellishments. The alterations reflect the Environmental Look, which perceived the woody and earth-toned feeling as being more compatible with the local environment. However, they appear to be reversible, and the building still has enough integrity to make it be eligible for historic designation as an individual local resource.

List of Non-Contributing Buildings and Sites

Commercial Properties		
Address	**Name**	**Condition / Reason**
3931 Topanga Canyon Blvd.	Malibu Feed Bin	The current building and adjoining Oasis Furniture sales yard are less than 50 years old, and have experienced substantial alterations.
18661 Pacific Coast Highway	Reel Inn	The building is relatively young, ca. 1985, and does not represent a particularly significant architectural resource, nor is it associated with any major historic trends or noted personage.
18717 Pacific Coast Highway	Topanga Ranch Market	1970-1980-era alterations and remodeling have compromised architectural integrity.
18741 Pacific Coast Highway	Money House	The building is relatively young, ca. 1970s, and does not represent a particularly significant architectural resource, nor is it associated with any major historic trends or noted personage.
18753 Pacific Coast Highway	Something Fishy	
18763 Pacific Coast Highway	Cholada Thai Beach Cuisine	It no longer reflects the simple, yet functional abstract modernism of the post war period due to alterations and remodeling.
18803 Pacific Coast Highway	Ginger Snips	Due to numerous alterations, additions, and remodeling, its present condition no longer reflects the simple, yet functional rustic beach-oriented cottage that it once was.

Residential Properties		
Address	**Name**	**Condition / Reason**
3462 Brookside Drive		An addition has reduced the building's level of significance. Also, its level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
Brookside Drive (Address Unknown)	Bougainvillea House	Its level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
Brookside Drive (Address Unknown)	Bee House	Remodeling and additions have reduced the building's level of significance.
Brookside Drive (Address Unknown)	Cable Car Platform East Brookside Drive	Its minimum age and level of significance do not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
Brookside Drive (Address Unknown)	Cable Car Platform West Brookside Drive	Its minimum age and level of significance do not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
Brookside Drive (Address Unknown)	Cabin Site 1, Brookside Drive	The site's feature's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.

Brookside Drive (Address Unknown)	Cabin Site2, Brookside Drive	The site's feature's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3964 Old Malibu Road		Its level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3968 Old Malibu Road		Its level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3974 Old Malibu Road		Its level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3977 Old Malibu Road		Remodeling and additions have reduced the building's level of significance.
3983 Old Malibu Road		Extensive remodeling and additions have reduced the building's level of significance.
3986 Old Malibu Road		Extensive remodeling and additions have reduced the building's level of significance.
3989 Old Malibu Road		Extensive remodeling and additions have reduced the building's level of significance.
3991 Old Malibu Road		Extensive remodeling and additions have reduced the building's level of significance.
Brick Pavement, Old Malibu Road		Its level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
House Site, Old Malibu Road		Its level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
18805 Pacific Coast Highway		Its level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
18807 Pacific Coast Highway		Its level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3701 Rodeo Grounds		An addition has reduced the building's level of significance.
3703 Rodeo Grounds		An addition has reduced the building's level of significance.
3707 Rodeo Grounds		An addition has reduced the building's level of significance.
3712 Rodeo Grounds		Additions and remodeling have reduced the building's level of significance.
3715 Rodeo Grounds	Peter Lorrie/Humphrey Bogart Cabin	Corroborating data could not be found to substantiate claim that either Peter Lorrie or Humphrey Bogart occupied this cabin. Additions and remodeling have reduced the building's level of significance.
3715_ Rodeo Grounds		Additions and remodeling have reduced the building's level of significance.
3719 Rodeo Grounds		Room extension and remodeling has reduced the building's level of significance.
3719 _ Rodeo Grounds		Additions and remodeling have reduced the building's level of significance.
3720 Rodeo Grounds		The building's estimated date of construction (1960-70) and extensive additions has reduced its level of significance.
3726 Rodeo Grounds		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3727 Rodeo Grounds		An addition has reduced the building's level of significance.
3739 Rodeo Grounds		The building's estimated date of construction (1970-80) has reduced its level of significance.
3747 Rodeo Grounds		An addition has reduced the building's level of significance.

3751 Rodeo Grounds		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3833 Topanga Canyon Lane		Remodeling and additions have reduced the building's level of significance.
3839 Topanga Canyon Lane		Additions have reduced the building's level of significance, and it may not meet minimum age requirements.
3861 Topanga Canyon Lane		Remodeling and additions have reduced the building's level of significance.
3904 Topanga Canyon Lane		Remodeling has reduced the building's level of significance.
3908 Topanga Canyon Lane		Remodeling has reduced the building's level of significance.
3914 Topanga Canyon Lane		Extensive remodeling and additions have reduced the building's level of significance.
3928 Topanga Canyon Lane		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3948 Topanga Canyon Lane		Extensive remodeling and additions have reduced the building's level of significance.
Topanga Canyon Lane (Address Unknown)	Cabin Site with Rock Wall	The site's feature's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
Topanga Canyon Lane (Address Unknown)	Cabin with Pink Tub in Topanga Canyon Lane	The site's feature's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
2575 Topanga Canyon Boulevard		Remodeling and additions have reduced the building's level of significance.
2813 Topanga Canyon Boulevard		Built circa 1967, if not earlier. Does not meet minimum age requirements.
2905 Topanga Canyon Boulevard	Cabin Remains	The site's feature's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3221 Topanga Canyon Boulevard		Extensive remodeling and additions have reduced the building's level of significance.
3430 Topanga Canyon Boulevard		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3431 Topanga Canyon Boulevard		Extensive remodeling and additions have reduced the building's level of significance.
3504 Topanga Canyon Boulevard		Remodeling and additions have reduced the building's level of significance.
3681 Topanga Canyon Boulevard	Electrical Shop	The building is not eligible for placement on the National Register at this time. Additional historical and architectural research is being performed on the property.
3725 Topanga Canyon Boulevard		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3731 Topanga Canyon Boulevard		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3751 Topanga Canyon Boulevard		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3801 Topanga Canyon Boulevard		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.

3813 Topanga Canyon Boulevard		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3831 Topanga Canyon Boulevard		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3843 Topanga Canyon Boulevard		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3851 Topanga Canyon Boulevard		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3903 Topanga Canyon Boulevard		The building's level of significance does not warrant its eligibility for separate listing, nor is it eligible for listing as a contributor to a documented district.
3905 Topanga Canyon Boulevard		Additions have reduced the building's level of significance, and it may not meet minimum age requirements.
3921 Topanga Canyon Boulevard		Remodeling and additions have reduced the building's level of significance.

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Topanga Beach Auto Court, ca. 1938.
Topanga Beach Auto Court, Looking East along Coast Highway, ca. 1938.
Topanga Lagoon, Looking at Sunset Mesa in Background, ca. 1929.
Topanga Lagoon, Looking at the Old Malibu Road Bridge and the Southern Entrance to Topanga Canyon, ca. 1929.
Topanga Lagoon, Old Malibu Road, ca. 1929.
West from Topanga Road, ca. 1923.

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ARCHAEOLOGICAL MONITORING OF FOUR BORINGS WITHIN A 20th CENTURY BERM AT LOWER TOPANGA CANYON

Michael Sampson
Associate State Archaeologist
California State Parks

April 2005

Michael Sampson, Associate State Archaeologist at Southern Service Center, monitored the excavation of four (4) bore holes by a mechanical drill rig on February 17, 2005. The project location is the newly acquired Lower Topanga Parcel of Topanga State Park in Los Angeles County. The area of testing lay a short distance east, or inland, from the Pacific Ocean and northwest of Topanga Canyon Blvd. The latter test holes were placed in a north-south alignment along a terrace that parallels Topanga Creek; the terrace is reported to have been created by the placement of fill sediments in the latter half of the twentieth century. See attached map for location of the four holes. This berm of fill would have served to protect the adjoining residences (some of which are ramshackle in nature) from flood episodes within Topanga Creek. The drilling was accomplished by a hollow stem mechanical auger mounted on a truck operated by staff from Layne Christenson Company. The drill rig produced an eight-inch diameter hole. A geologist from Geopentech Company of Santa Ana, Rebecca Fusee, gathered the core samples at each test hole for detailed analysis at her company's lab. Rosi Dagit, Resource Conservation District project manager, and Greg Dorame, Native American community representative, were also on-site during the testing.

Two older residents of the adjoining community in Lower Topanga Canyon told Rosi Dagit that the sediments contained within the berm were placed there after a major flood event in 1969. According to other information gathered by Rosi Dagit, additional fill material was placed within the present project area after a flood event in 1980. The 1980 flood material apparently originated from Topanga Canyon Boulevard; a man who served on the clean-up crew in 1980 provided this information to Ms. Dagit.

The four bore holes excavated on 2/17/05 in the presence of Michael Sampson were situated at the two extreme ends of the berm, along with two other holes in between. Such placement permitted the archaeological monitor to view subsurface materials throughout the present project area. The findings from the four bore holes are consistent with the oral history accounts that the existing terrace along Topanga Creek in the Lower Topanga parcel is constructed of fill materials. Observations by the on-site geologist, Rebecca Fusee, and by Michael Sampson reached the conclusion that only fill material is present here. It should be noted, too, that the test borings stopped at depths ranging from 13 feet below present ground surface to 18 feet below ground surface when the holes reached water. No prehistoric or significant historic-period cultural remains were uncovered in the four bore holes.

APPENDIX E
Geotechnical Studies

RODEO GROUNDS BERM REMOVAL STUDY

SOIL CHARACTERIZATION

For

Resource Conservation District of the Santa Monica Mountains
122 North Topanga Canyon Boulevard
Topanga, California 90290

April 2005

601 N. Parkcenter Drive, Suite 210, Santa Ana, California 92705
Phone (714) 796-9100 Fax (714) 796-9191 Web Site: geopentech.com

Table of Contents

1.0 INTRODUCTION

This report presents the results of GeoPentech's soil investigation for the Rodeo Grounds Berm Removal Study, in Los Angeles County, California. The investigation was completed under the agreement dated February 11, 2005 between the Resource Conservation District of the Santa Monica Mountains (RCDSMM) and GeoPentech. The Rodeo Grounds Berm site is located about 19 miles west of downtown Los Angeles. A general location map is shown on Figure 1

1.1 Project Overview

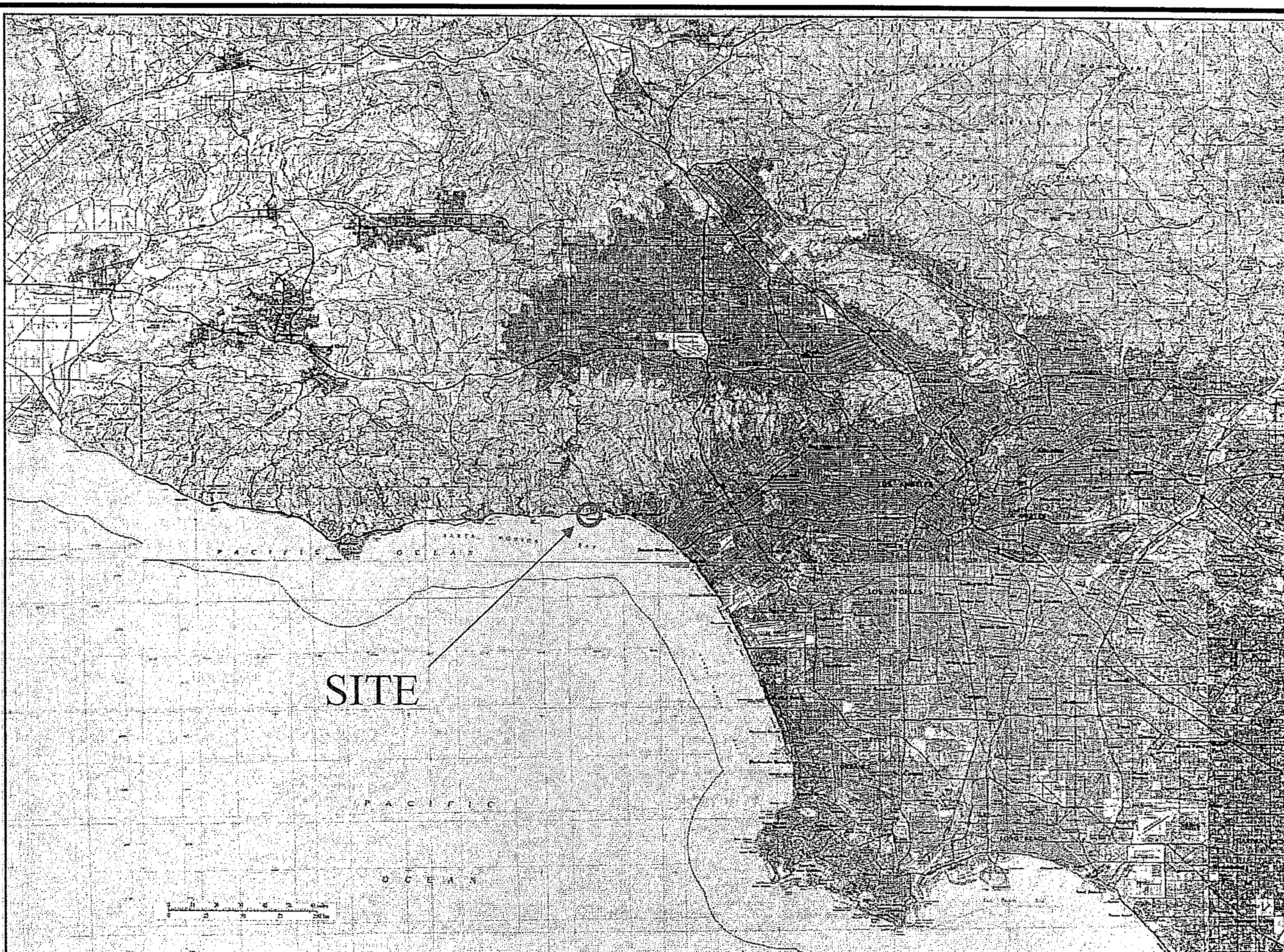
Our understanding of the project is based on our discussions with Ms. Rosi Dagit of the RCDSMM. It is our understanding that the Rodeo Grounds Berm has been identified as a significant constraint to the natural hydraulic processes of Topanga Creek and has impacted fish habitat upstream and downstream of the berm. The goal of the project is to remove the berm, which will restore the creek to its original condition and restore fish habitat.

The objective of the soil investigation was to collect subsurface data to characterize the proposed material to be removed in order to evaluate disposal options and costs.

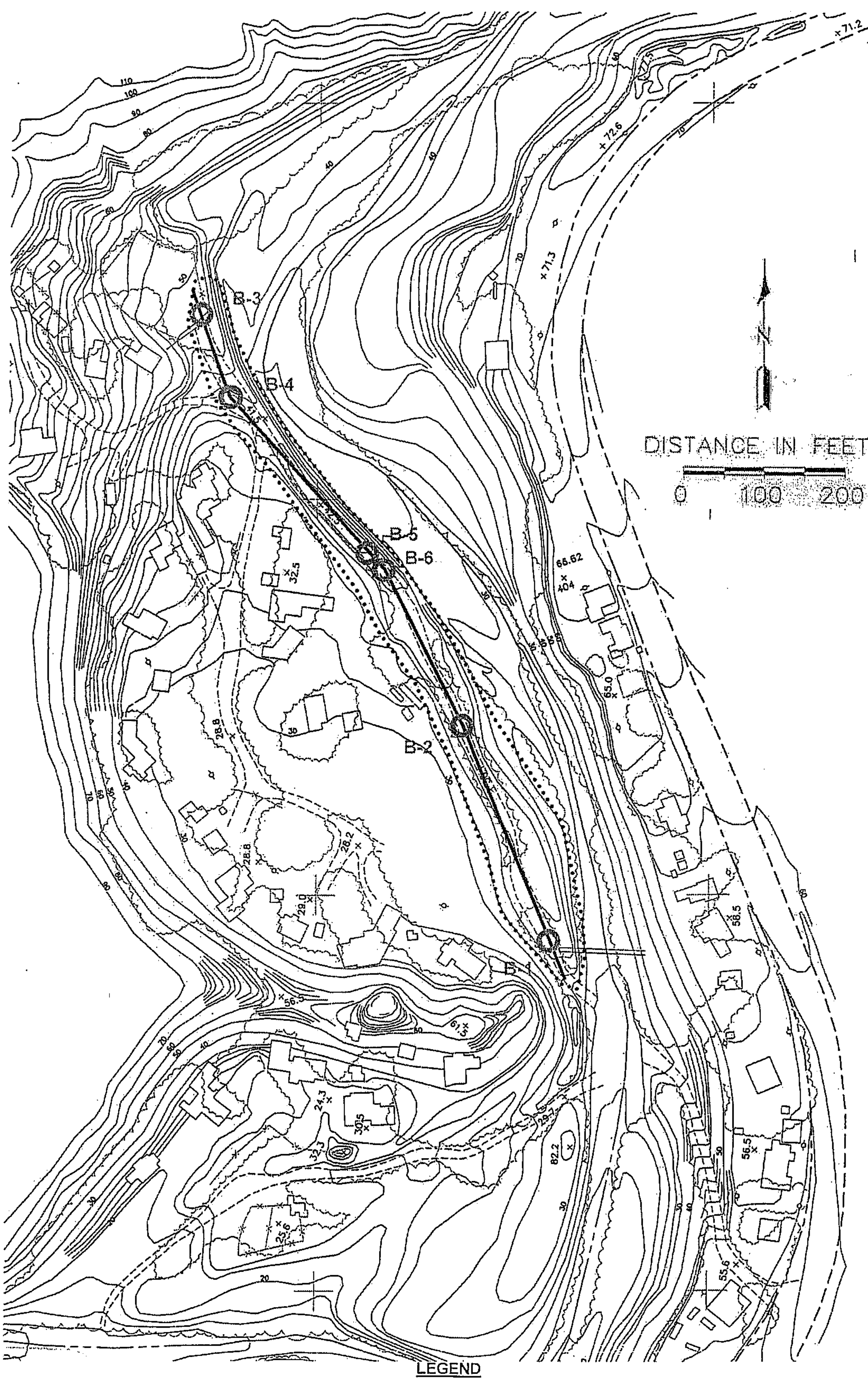
1.2 Description of Berm

The Rodeo Grounds Berm is located on the west edge of Topanga Creek approximately 2,500 feet upstream from the Pacific Ocean. The source of the berm fill material and methods used to construct the berm are undocumented. According to conversations by Ms. Dagit with local residents, it appears that the berm was built in two stages. The berm was initially constructed in 1969 after a major flood event to protect residences living immediately downstream of Topanga Creek. Additional fill material was placed on the berm after another flood event in 1980. According to local residences, the sources of at least a portion of the berm fill material may have been imported from Topanga Canyon Boulevard and a Lincoln Boulevard road demolition in Marina Del Rey.

The berm is trapezoidal in shape, and a dirt road, Rodeo Grounds Road, passes over the top of the berm. The berm is approximately 1,000 feet long and varies in width between approximately 40 feet and 100 feet, as shown on Figure 2. According to GPS survey data collected by RCDSMM staff, the total surface area of the berm (from toe to toe) is



GeoPentech	SITE LOCATION	PROJECT: RODEO GROUNDS BERM STUDY		
		PROJECT #: **05015A**	DATE: **APR. 2005**	FIGURE: **1**

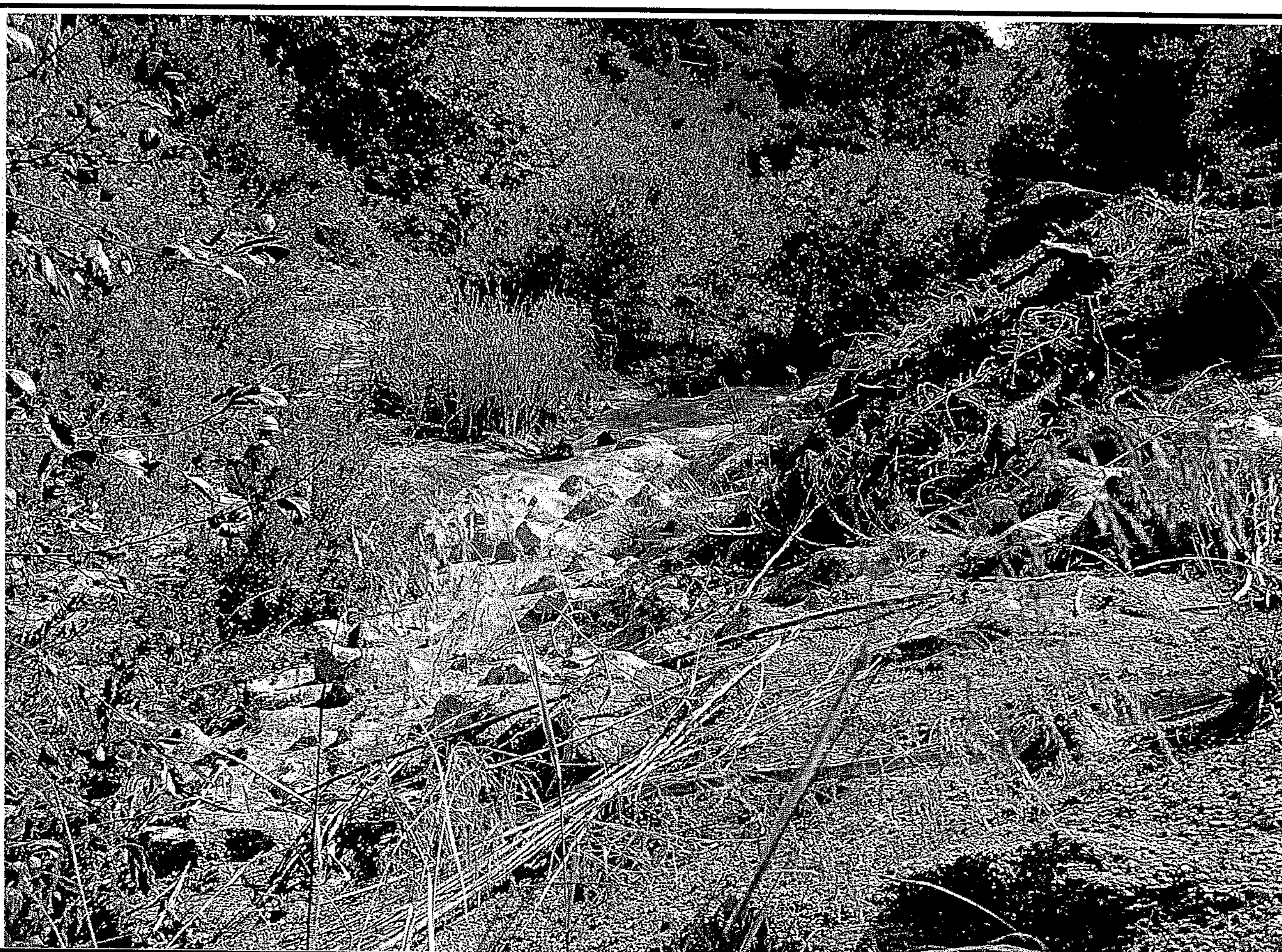


LEGEND

B-1 Borehole Location ·········· Approximate Berm Extents ———— Approximate Profile Location

GeoPentech	BOREHOLE LOCATION MAP	PROJECT: RODEO GROUNDS BERM STUDY		
		PROJECT #: 05015A	DATE: APR. 2005	FIG: 2

approximately 80,000 ft^2 (1.8 acres). Also, the east berm slope is covered with concreted in place boulders for erosion control, as shown on Figure 3.



GeoPentech	CONCRETED IN-PLACE BOULDERS ALONG EAST BERM SLOPE	PROJECT: RODEO GROUNDS BERM STUDY		
		PROJECT #: 05015A	DATE: APR. 2005	FIGURE: 3

2.0 SCOPE OF WORK

The following four tasks were performed as part of our soil investigation for the Rodeo Grounds Berm Removal Study:

Task 1: Performed a field investigation that included advancing six hollow stem auger boreholes.

Task 2: Performed chemical laboratory tests on soil samples collected during the field investigation.

Task 3: Developed a characterization of the site's soils, based on the results of Tasks 1 and 2. The characterization forms the basis for the evaluation of the soil disposal options and approximate costs.

Task 4: Prepared this report to present the results of the soil evaluation.

Results of the above tasks are summarized below.

3.0 FIELD INVESTIGATION

Six hollow stem auger boreholes (B-1 through B-6) were completed on February 17, 2005. The boreholes were located throughout and within the area of the proposed berm removal. The approximate locations of the boreholes and the approximate extents of the berm are shown on Figure 2.

3.1 Hollow Stem Auger Boreholes

The boreholes were conducted under the direct supervision of a geologist from Geopentech. The hollow-stem auger boreholes were advanced by Layne Christensen Drilling. The boreholes were advanced using an all-terrain CME 750 drill rig using an 8-inch outside diameter hollow-stem auger to depths ranging from about 6.5 feet to about 18.5 feet below existing grade (about elevation 18.5 feet to about 30 feet above sea level). The depths of the boreholes were targeted to extend to just below the base of the berm fill; however borehole B-5 hit refusal at a depth of 6.5 feet within the berm fill materials on an apparent sandstone boulder. As a result, borehole B-6 was drilled nearby to obtain additional deeper subsurface information. During drilling, subsurface conditions were logged and recorded. The soil materials were visually classified in accordance with the Unified Soil Classification System. A key to the log of the hollow-stem auger boreholes and the logs of the boreholes are presented in Attachment A.

Drive-samples were collected at between 2- to 5-foot intervals in the boreholes, using an 18-inch long modified California sampler. The modified California sampler was driven 18 inches or to refusal into the bottom of the borehole by repeatedly dropping a 140-pound hammer 30 inches. Samples collected by the California sampler were stored in brass tubes and sealed with vinyl caps. Samples collected during the drilling were labeled, stored, and transported to Calscience Environmental Laboratories, Inc. in Garden Grove, California for further examination and testing. Also, a bag sample of composited drill cuttings for the entire length of borehole was collected at each borehole location.

Upon completion of drilling the boreholes were backfilled with the excavated cuttings. Backfill in the borehole was compacted using a tamper attached to the drill rig. After the borehole was backfilled, the ground surface was restored.

3.2 Borehole Results

Two geologic units, "Fill" and "Creek Deposits", were encountered during the field investigation. These two units and the groundwater conditions are discussed below.

Fill

The fill was encountered from the ground surface to a depth of between about 12 and 14.5 feet below ground surface (about elevation 22.5 feet to 33.5 feet above sea level). The fill primarily consisted of loose to medium dense, moist, silty sand (SM) to sand (SP) with some layers of dense to very dense silty sand with gravel (SM) and silty clayey sand (SC-SM). Borehole B-3 drilled at the north end of the berm consisted of stiff to very stiff, moist sandy clay (CL) and loose, moist, clayey sand (SC). Also, an approximately 5-foot thick zone of fill material with fragments of asphalt was encountered in boreholes B-3, B-4, and B-6.

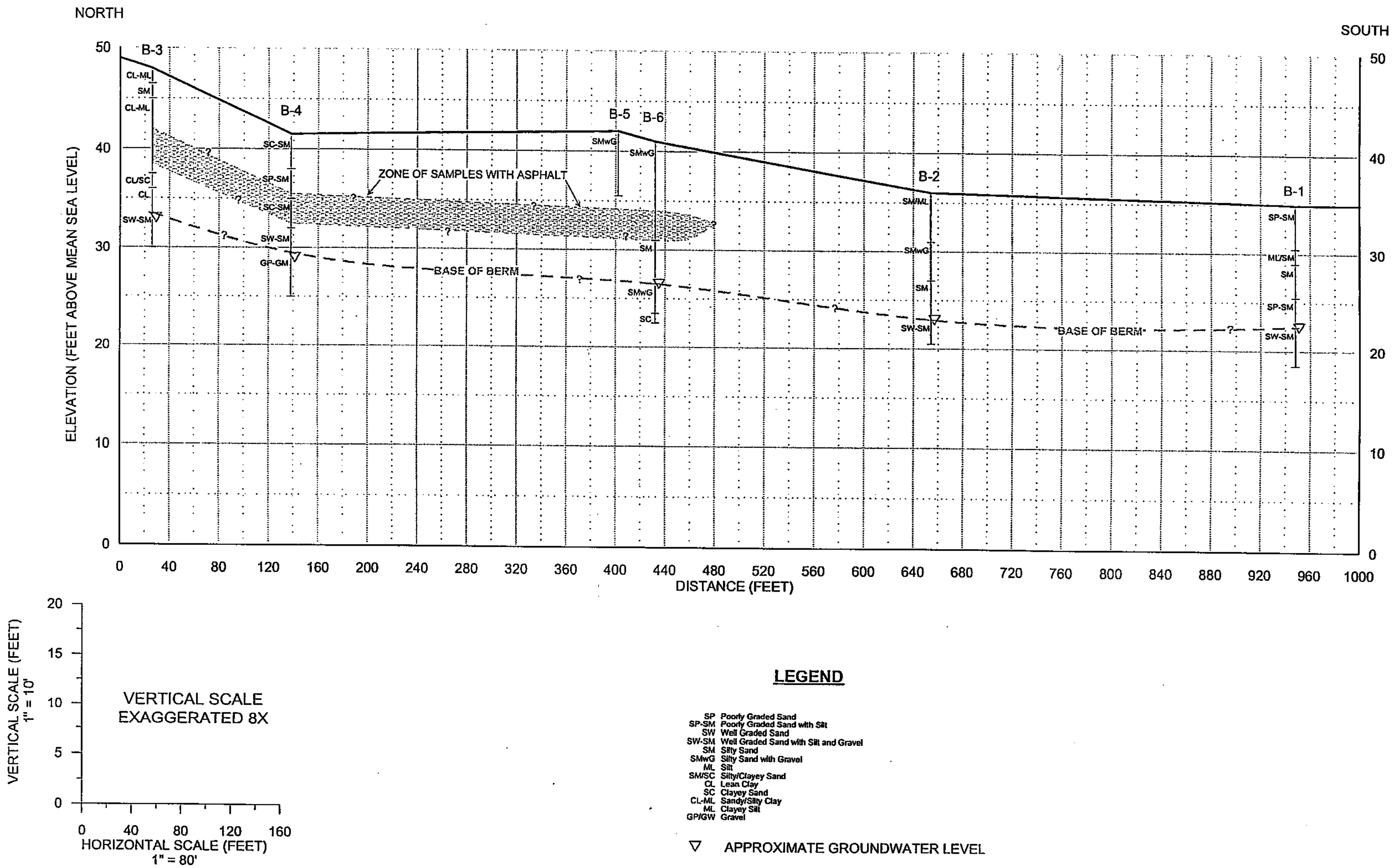
The borehole results are shown on the profile in Figure 4. This profile shows the distribution of soil types encountered in the boreholes, the groundwater elevation encountered in the boreholes, the estimated base of the berm fill, and the estimated zone of fill material with asphalt fragments.

Topanga Creek Deposits

The Topanga Creek Deposits were encountered below the Fill. The Creek Deposits primarily consisted of medium dense to dense, wet, well-graded sand to poorly graded gravel with silt and gravel (SW-SM to GP-GM). Within borehole B-6, the Creek Deposits consisted of loose, wet, silty sand with gravel (SM) and very dense, wet clayey sand (SC).

Groundwater

The groundwater surface was encountered in all the boreholes except B-5, which encountered refusal at a depth of 6.5 feet. Generally, the groundwater surface was encountered in the Creek Deposits at depths between approximately 12 and 14.5 feet below ground surface (about elevation 22.5 feet to 33.5 feet above sea level). The depth to groundwater generally correlated with the depth to the top of the Creek Deposits (or the base of the Fill).



LEGEND

SP	Poorly Graded Sand
SP-SM	Poorly Graded Sand with Silt
SW	Well Graded Sand
SW-SM	Well Graded Sand with Silt and Gravel
SM	Silty Sand
SMwG	Silty Sand with Gravel
ML	Silt
SM/SC	Silty/Clayey Sand
CL	Lean Clay
SC	Clayey Sand
CL-ML	Sandy/Silty Clay
ML	Clayey Silt
GP/GW	Gravel

▽ APPROXIMATE GROUNDWATER LEVEL

NOTE: SEE FIGURE 2 FOR LOCATION OF PROFILE.

GeoPentech	Project: RODEO GROUNDS BERM STUDY	Project No.: 05015A	GEOLOGIC PROFILE	Date: APR. 2005	Figure: 4

4.0 LABORATORY TESTING

The laboratory testing program performed for the Rodeo Grounds Berm site included chemical tests for waste characterization of the berm fill soil for disposal options. The chemical tests were performed in general accordance with applicable procedures of the Environmental Protection Agency (EPA).

4.1 Chemical Testing Procedures

Both the federal government (US EPA), as part of the Resource Conservation and Recovery Act (RCRA), and the state government (California Department of Health Services (DHS) / Department of Toxic Substances Control (DTSC)), as part of the California Code of Regulations (CCR) Title 22, have developed regulations for waste disposal in either municipal or hazardous waste landfills. These regulations focus on the leaching characteristics of the chemical compounds contained in the waste under conditions that are designated to simulate the environment of a municipal landfill, where water may pass through landfill waste and travel into the groundwater, carrying the soluble materials with it.

Two leaching test procedures are used by the state of California. These procedures are known as the Total Threshold Limit Concentration (TTLC) leaching test and the Soluble Threshold Limit Concentration (STLC) leaching test. The TTLC test can be performed relatively fast and involves 1.5 hours of extraction in strong acid. The STLC test takes longer to complete and involves 48 hours of extraction using a citric acid leaching solution. The federal leaching procedure is known as the Toxic Characteristic Leaching Procedure (TCLP) leaching test and involves 18 hours of extraction with an acetic acid leaching solution. In general, the California method (STLC) is a more aggressive test than the federal method (TCLP) and results in higher measured chemical concentrations. California has adopted stricter criteria regarding hazardous waste classification; therefore, material classified by California standards (STLC) as hazardous may be recognized in other states as non-hazardous following federal standards (TCLP). The federal and state hazardous waste regulatory limits using TTLC, STLC, and TCLP testing procedures are summarized on Table 1.

The TTLC analysis determines the total concentration of each target analyte in a sample and is usually performed first. When any target analyte exceeds the TTLC limit shown on Table 1, the waste is classified as hazardous, and further testing is not required. If the TTLC result is below the TTLC limit and above ten times the STLC limit, than the STLC test must be

TABLE 1
STATE (TITLE 22-TTLC, STLC) AND FEDERAL (RCRA-TCLP) HAZARDOUS WASTE CRITERIA

Inorganic Parameters/Metals (Methods: EPA 6010B, 7000 Series)			
	TTLC[a]	STLC	TCLP
Parameters	mg/kg	mg/l	mg/l
Antimony	500	15	
Arsenic	500	5	5
Barium	10,000[b]	100	100
Beryllium	75	0.75	
Cadmium	100	1	1
Chromium	2,500	5 (560)	5
Cobalt	8,000	80	
Copper	2,500	25	
Lead	1,000	5	5
Mercury	20	0.2	0.2
Molybdenum	3,500	350	
Nickel	2,000	20	
Selenium	100	1	1
Silver	500	5	5
Thallium	700	7	
Vanadium	2,400	24	
Zinc	5,000	250	
Chromium (VI)	500	5	
Fluoride Salts	18,000	180	
Asbestos	1%		
Volatiles (Method: EPA 8260B)			
Benzene			0.5
Carbon tetrachloride			0.5
Chlorobenzene			100
Chloroform			6
1,4-Dichlorobenzene			7.5
1,2-Dichloroethane			0.5
1,1-Dichloroethylene			0.7
Methyl ethyl ketone (MEK)			200
Tetrachloroethylene (PCE)			0.7
Trichloroethylene (TCE)	2,040	204	0.5
Vinyl chloride			0.2
[a] Values expressed as wet weight [b] Excluding barium sulfate			

Chlorophenoxy Acid Herbicides (Method: EPA 8151A)			
	TTLC[a]	STLC	TCLP
Compound	mg/kg	mg/l	mg/l
2,4-Dichlorophenoxyacetic acid	100	10	10
2,4,5-TP (Silvex)	10	1	1
Organochlorine Pesticides / PCBs (Method: EPA 8081A)			
Aldrin	1.4	0.14	
Chlordane	2.5	0.25	0.03
DDT/DDE/DDD	1	0.1	
Dieldrin	8	0.8	
Endrin	0.2	0.02	0.02
Heptachlor (& its Epoxide)	4.7	0.47	0.008
Kepone	21	2.1	
Lindane	4	0.4	0.4
Methoxychlor	100	10	10
Mirex	21	2.1	
Toxaphene	5	0.5	0.5
Semi-Volatiles (Method: EPA 8270C)			
o-Cresol			200
m-Cresol			200
p-Cresol			200
Cresols (Total)			200
2,4-Dinitrotoluene			0.13
Hexachlorobenzene			0.13
Hexachlorobutadiene			0.5
Hexachloroethane			3
Nitrobenzene			2
Pentachlorophenol	17	1.7	100
Pyridine			5
2,4,5-Trichlorophenol			400
2,4,6-Trichlorophenol			2
Miscellaneous (Methods: EPA 8280*, CADHS-LUFT/7420)**			
Dioxin (2,3,7,8-TCDD)*	0.01	0.001	
Organic Lead Compounds**	13		
See Sec. 22-66261.27.(a)(7) for Additional Toxicity Compound/Criteria.			
Title (26) 22 Toxicity Criteria Section 22-66261.24			

performed. If the result of the STLC test is above the STLC limit, the material is considered California classified hazardous waste, and if the result of the STLC test is below the STLC limit, the material is considered non-hazardous for that analyte.

If the TTLC result is below the TTLC limit and above twenty times the TCLP limit, than the TCLP test may be performed. If the TCLP test result is above the TCLP limit, than the material is considered federally classified hazardous waste, and if the result of the TCLP test is below the TCLP limit, the material is considered by federal classification as non-hazardous for that analyte. If the TTLC result is less than ten times the STLC or twenty times the TCLP than the material is considered non hazardous for that analyte.

For example, the TTLC, STLC, and TCLP for lead on Table 1 are 1,000 mg/kg, 5 mg/l, and 5 mg/l, respectively. If the TTLC result for lead is above 1,000 mg/kg than the material is considered hazardous waste. If the TTLC result is below 1,000 mg/kg and above ten times the STLC (10 x 5 mg/l) or 50, a STLC test must be performed. If the result of the STLC is above 5 mg/l, the material is classified as California hazardous waste. If the TTLC result is below 1,000 mg/kg and above twenty times the TCLP (20 x 5 mg/l) or 100, a TCLP test may be performed. If result of the TCLP test is above 5 mg/l the material is federally classified as hazardous waste. Otherwise, the material is classified as non-hazardous for lead.

4.2 Chemical Test Results

The chemical tests were performed at the laboratory facilities of Calscience Environmental Laboratories, Inc. in Garden Grove, California. A total of 10 samples were prepared for testing. Samples were analyzed for metals (EPA 6010B, EPA 7471A), volatile organics (EPA 8260B), semi-volatile organics (EPA 8270C), and total petroleum hydrocarbons (DHS LUFT). The sample locations and testing procedures are summarized in the Table 2. The data from the chemical laboratory testing are included in Appendix B. Appendix B contains the laboratory datasheets for the chemical test results as well as the quality control results.

The results of the chemical testing are summarized on Tables 3 and 4. Table 3 summarizes the compounds that were detected using TTLC procedures sorted by sample number, and Table 4 summarizes the compounds that were detected using TTLC procedures sorted by compound. As shown on Tables 3 and 4, the tested compound concentrations were below the TTLC hazardous waste criteria, where designated, shown on Table 1. With the exception of

TABLE 2
SAMPLE LOCATION AND TESTING PROCEDURES

BOREHOLE ID	DEPTH (FT)	SAMPLE ID	TEST PROCEDURES		
			TTLC	STLC (LEAD)	TCLP (LEAD)
B-1	3 - 3.5 and 6 - 6.5 (composite)	COMP(B1-CA-1B, B1-CA-2B)	X		
B-1	11 - 11.5	B1-CA-3B	X		
B-2	3 - 3.5 and 6 - 6.5 (composite)	COMP(B2-CA-1B, B2-CA-2B)	X		
B-2	9 - 9.5 and 12 - 12.5 (composite)	COMP(B2-CA-3B, B2-CA-4)	X	X	X
B-3	12 - 12.5	B3-CA-4B	X		
B-4	3.5 - 4	B4-CA-1B	X		
B-5	4 - 4.5	B5-CA-1B	X	X	X
B-6	4- 4.5	B6-CA-1B	X		
B-6	10 – 10.5 and 13 – 13.5 (composite)	COMP(B6-CA-3, B6-CA-4)	X	X	X
B-3, B-4, B-6	6 – 6.5, 6 – 6.5, and 7 – 7.5 (composite)	COMP(B3-CA-2B, B4-CA-2B, B6-CA-2B)	X	X	X

TABLE 3
DETECTED COMPOUNDS USING TTLC PROCEDURES SORTED BY SAMPLE ID

SAMPLE ID	COMPOUND NAME	TTLC CONCENTRATION	UNITS
COMP(B1-CA-1B, B1-CA-2B)			
COMP (B1-CA-1B, B1-CA-2B)	Arsenic	3.43	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Barium	87.4	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Beryllium	0.450	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Chromium (Total)	19.7	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Cobalt	9.14	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Copper	25.8	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Lead	10.1	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Nickel	29.5	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Vanadium	27.3	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Zinc	53.4	mg/kg
B1-CA-3B			
B1-CA-3B	Arsenic	2.41	mg/kg
B1-CA-3B	Barium	52.2	mg/kg
B1-CA-3B	Chromium (Total)	11.0	mg/kg
B1-CA-3B	Cobalt	5.65	mg/kg
B1-CA-3B	Copper	10.9	mg/kg
B1-CA-3B	Lead	3.25	mg/kg
B1-CA-3B	Nickel	20.7	mg/kg
B1-CA-3B	Vanadium	15.9	mg/kg
B1-CA-3B	Zinc	26.6	mg/kg
COMP(B2-CA-1B, B2-CA-2B)			
COMP (B2-CA-1B, B2-CA-2B)	Arsenic	4.71	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Barium	113	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Beryllium	0.417	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Cadmium	0.837	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Chromium (Total)	24.8	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Cobalt	9.28	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Copper	29.9	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Lead	109	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Mercury	0.103	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Molybdenum	0.284	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Nickel	25.2	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Silver	0.317	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Vanadium	33.3	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Zinc	107	mg/kg
COMP(B2-CA-3B, B2-CA-4)			
COMP (B2-CA-3B, B2-CA-4)	Arsenic	2.92	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Barium	53.6	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Chromium (Total)	12.2	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Cobalt	6.63	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Copper	20.6	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Lead	9.19	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Nickel	29.4	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Vanadium	18.2	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Zinc	41.6	mg/kg

TABLE 3
DETECTED COMPOUNDS USING TTLC PROCEDURES SORTED BY SAMPLE ID

SAMPLE ID	COMPOUND NAME	TTLC CONCENTRATION	UNITS
B3-CA-4B			
B3-CA-4B	1,2-Dichlorobenzene	5.3	ug/kg
B3-CA-4B	Arsenic	12.8	mg/kg
B3-CA-4B	Barium	130	mg/kg
B3-CA-4B	Beryllium	0.636	mg/kg
B3-CA-4B	Cadmium	0.591	mg/kg
B3-CA-4B	Chromium (Total)	34.3	mg/kg
B3-CA-4B	Cobalt	12.1	mg/kg
B3-CA-4B	Copper	31.6	mg/kg
B3-CA-4B	Lead	8.18	mg/kg
B3-CA-4B	Nickel	34.1	mg/kg
B3-CA-4B	Vanadium	48.2	mg/kg
B3-CA-4B	Zinc	78.6	mg/kg
B4-CA-1B			
B4-CA-1B	Arsenic	3.76	mg/kg
B4-CA-1B	Barium	117	mg/kg
B4-CA-1B	Beryllium	0.286	mg/kg
B4-CA-1B	Chromium (Total)	15.0	mg/kg
B4-CA-1B	Cobalt	5.85	mg/kg
B4-CA-1B	Copper	35.8	mg/kg
B4-CA-1B	Lead	1.93	mg/kg
B4-CA-1B	Nickel	7.38	mg/kg
B4-CA-1B	Silver	0.457	mg/kg
B4-CA-1B	Vanadium	21.4	mg/kg
B4-CA-1B	Zinc	37.9	mg/kg
B5-CA-1B			
B5-CA-1B	Arsenic	4.44	mg/kg
B5-CA-1B	Barium	103	mg/kg
B5-CA-1B	Beryllium	0.292	mg/kg
B5-CA-1B	Chromium (Total)	18.4	mg/kg
B5-CA-1B	Cobalt	7.97	mg/kg
B5-CA-1B	Copper	36.0	mg/kg
B5-CA-1B	Lead	163	mg/kg
B5-CA-1B	Nickel	18.0	mg/kg
B5-CA-1B	Silver	0.270	mg/kg
B5-CA-1B	Vanadium	29.3	mg/kg
B5-CA-1B	Zinc	94.6	mg/kg
B6-CA-1B			
B6-CA-1B	Arsenic	2.66	mg/kg
B6-CA-1B	Barium	35.6	mg/kg
B6-CA-1B	Beryllium	0.296	mg/kg
B6-CA-1B	Chromium (Total)	19.8	mg/kg
B6-CA-1B	Cobalt	6.12	mg/kg
B6-CA-1B	Copper	14.7	mg/kg
B6-CA-1B	Lead	5.77	mg/kg
B6-CA-1B	Nickel	22.8	mg/kg
B6-CA-1B	Vanadium	24.4	mg/kg
B6-CA-1B	Zinc	37.7	mg/kg

TABLE 3
DETECTED COMPOUNDS USING TTLC PROCEDURES SORTED BY SAMPLE ID

SAMPLE ID	COMPOUND NAME	TTLC CONCENTRATION	UNITS
COMP(B6-CA-3, B6-CA-4)			
COMP (B6-CA-3, B6-CA-4)	1,2,4-Trimethylbenzene	10	ug/kg
COMP (B6-CA-3, B6-CA-4)	Acetone	130	ug/kg
COMP (B6-CA-3, B6-CA-4)	Arsenic	5.64	mg/kg
COMP (B6-CA-3, B6-CA-4)	Barium	116	mg/kg
COMP (B6-CA-3, B6-CA-4)	Beryllium	0.342	mg/kg
COMP (B6-CA-3, B6-CA-4)	Chromium (Total)	31.9	mg/kg
COMP (B6-CA-3, B6-CA-4)	Cobalt	8.54	mg/kg
COMP (B6-CA-3, B6-CA-4)	Copper	44.0	mg/kg
COMP (B6-CA-3, B6-CA-4)	Lead	95.9	mg/kg
COMP (B6-CA-3, B6-CA-4)	Mercury	0.0977	mg/kg
COMP (B6-CA-3, B6-CA-4)	Molybdenum	3.26	mg/kg
COMP (B6-CA-3, B6-CA-4)	Nickel	21.9	mg/kg
COMP (B6-CA-3, B6-CA-4)	o-Xylene	5.3	ug/kg
COMP (B6-CA-3, B6-CA-4)	p/m-Xylene	13	ug/kg
COMP (B6-CA-3, B6-CA-4)	Silver	0.421	mg/kg
COMP (B6-CA-3, B6-CA-4)	Toluene	5.8	ug/kg
COMP (B6-CA-3, B6-CA-4)	Vanadium	31.6	mg/kg
COMP (B6-CA-3, B6-CA-4)	Zinc	93.3	mg/kg
COMP(B3-CA-2B, B4-CA-2B, B6-CA-2B)			
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	1,2,4-Trimethylbenzene	32	ug/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	1,3,5-Trimethylbenzene	12	ug/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Arsenic	5.27	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Barium	120	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Beryllium	0.398	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Chromium (Total)	26.4	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Cobalt	10.0	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Copper	49.6	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Lead	113	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Nickel	24.9	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	o-Xylene	12	ug/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	p/m-Xylene	24	ug/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Toluene	15	ug/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Vanadium	38.4	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Zinc	112	mg/kg

TABLE 4
DETECTED COMPOUNDS USING TTLC PROCEDURES SORTED BY COMPOUND NAME

SAMPLE ID	COMPOUND NAME	TTLC CONCENTRATION	UNITS
1,2,4-TRIMETHYLBENZENE			
COMP (B6-CA-3, B6-CA-4)	1,2,4-Trimethylbenzene	10	ug/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	1,2,4-Trimethylbenzene	32	ug/kg
1,2-DICHLOROBENZENE			
B3-CA-4B	1,2-Dichlorobenzene	5.3	ug/kg
1,3,5-TRIMETHYLBENZENE			
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	1,3,5-Trimethylbenzene	12	ug/kg
ACETONE			
COMP (B6-CA-3, B6-CA-4)	Acetone	130	ug/kg
ARSENIC			
B1-CA-3B	Arsenic	2.41	mg/kg
B6-CA-1B	Arsenic	2.66	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Arsenic	2.92	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Arsenic	3.43	mg/kg
B4-CA-1B	Arsenic	3.76	mg/kg
B5-CA-1B	Arsenic	4.44	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Arsenic	4.71	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Arsenic	5.27	mg/kg
COMP (B6-CA-3, B6-CA-4)	Arsenic	5.64	mg/kg
B3-CA-4B	Arsenic	12.8	mg/kg
BARIUM			
B6-CA-1B	Barium	35.6	mg/kg
B1-CA-3B	Barium	52.2	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Barium	53.6	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Barium	87.4	mg/kg
B5-CA-1B	Barium	103	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Barium	113	mg/kg
COMP (B6-CA-3, B6-CA-4)	Barium	116	mg/kg
B4-CA-1B	Barium	117	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Barium	120	mg/kg
B3-CA-4B	Barium	130	mg/kg
BERYLLIUM			
B4-CA-1B	Beryllium	0.286	mg/kg
B5-CA-1B	Beryllium	0.292	mg/kg
B6-CA-1B	Beryllium	0.296	mg/kg
COMP (B6-CA-3, B6-CA-4)	Beryllium	0.342	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Beryllium	0.398	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Beryllium	0.417	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Beryllium	0.450	mg/kg
B3-CA-4B	Beryllium	0.636	mg/kg
CADMIUM			
B3-CA-4B	Cadmium	0.591	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Cadmium	0.837	mg/kg

TABLE 4
DETECTED COMPOUNDS USING TTLC PROCEDURES SORTED BY COMPOUND NAME

SAMPLE ID	COMPOUND NAME	TTLC CONCENTRATION	UNITS
	CHROMIUM (TOTAL)		
B1-CA-3B	Chromium (Total)	11.0	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Chromium (Total)	12.2	mg/kg
B4-CA-1B	Chromium (Total)	15.0	mg/kg
B5-CA-1B	Chromium (Total)	18.4	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Chromium (Total)	19.7	mg/kg
B6-CA-1B	Chromium (Total)	19.8	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Chromium (Total)	24.8	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Chromium (Total)	26.4	mg/kg
COMP (B6-CA-3, B6-CA-4)	Chromium (Total)	31.9	mg/kg
B3-CA-4B	Chromium (Total)	34.3	mg/kg
	COBALT		
B1-CA-3B	Cobalt	5.65	mg/kg
B4-CA-1B	Cobalt	5.85	mg/kg
B6-CA-1B	Cobalt	6.12	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Cobalt	6.63	mg/kg
B5-CA-1B	Cobalt	7.97	mg/kg
COMP (B6-CA-3, B6-CA-4)	Cobalt	8.54	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Cobalt	9.14	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Cobalt	9.28	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Cobalt	10.0	mg/kg
B3-CA-4B	Cobalt	12.1	mg/kg
	COPPER		
B1-CA-3B	Copper	10.9	mg/kg
B6-CA-1B	Copper	14.7	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Copper	20.6	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Copper	25.8	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Copper	29.9	mg/kg
B3-CA-4B	Copper	31.6	mg/kg
B4-CA-1B	Copper	35.8	mg/kg
B5-CA-1B	Copper	36.0	mg/kg
COMP (B6-CA-3, B6-CA-4)	Copper	44.0	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Copper	49.6	mg/kg
	LEAD		
B4-CA-1B	Lead	1.93	mg/kg
B1-CA-3B	Lead	3.25	mg/kg
B6-CA-1B	Lead	5.77	mg/kg
B3-CA-4B	Lead	8.18	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Lead	9.19	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Lead	10.1	mg/kg
COMP (B6-CA-3, B6-CA-4)	Lead	95.9	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Lead	109	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Lead	113	mg/kg
B5-CA-1B	Lead	163	mg/kg
	MERCURY		
COMP (B6-CA-3, B6-CA-4)	Mercury	0.0977	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Mercury	0.103	mg/kg
	MOLYBDENUM		
COMP (B2-CA-1B, B2-CA-2B)	Molybdenum	0.284	mg/kg
COMP (B6-CA-3, B6-CA-4)	Molybdenum	3.26	mg/kg

TABLE 4
DETECTED COMPOUNDS USING TTLC PROCEDURES SORTED BY COMPOUND NAME

SAMPLE ID	COMPOUND NAME	TTLC CONCENTRATION	UNITS
	NICKEL		
B4-CA-1B	Nickel	7.38	mg/kg
B5-CA-1B	Nickel	18.0	mg/kg
B1-CA-3B	Nickel	20.7	mg/kg
COMP (B6-CA-3, B6-CA-4)	Nickel	21.9	mg/kg
B6-CA-1B	Nickel	22.8	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Nickel	24.9	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Nickel	25.2	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Nickel	29.4	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Nickel	29.5	mg/kg
B3-CA-4B	Nickel	34.1	mg/kg
	o-XYLENE		
COMP (B6-CA-3, B6-CA-4)	o-Xylene	5.3	ug/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	o-Xylene	12	ug/kg
	p/m-XYLENE		
COMP (B6-CA-3, B6-CA-4)	p/m-Xylene	13	ug/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	p/m-Xylene	24	ug/kg
	SILVER		
B5-CA-1B	Silver	0.270	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Silver	0.317	mg/kg
COMP (B6-CA-3, B6-CA-4)	Silver	0.421	mg/kg
B4-CA-1B	Silver	0.457	mg/kg
	TOLUENE		
COMP (B6-CA-3, B6-CA-4)	Toluene	5.8	ug/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Toluene	15	ug/kg
	VANADIUM		
B1-CA-3B	Vanadium	15.9	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Vanadium	18.2	mg/kg
B4-CA-1B	Vanadium	21.4	mg/kg
B6-CA-1B	Vanadium	24.4	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Vanadium	27.3	mg/kg
B5-CA-1B	Vanadium	29.3	mg/kg
COMP (B6-CA-3, B6-CA-4)	Vanadium	31.6	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Vanadium	33.3	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Vanadium	38.4	mg/kg
B3-CA-4B	Vanadium	48.2	mg/kg
	ZINC		
B1-CA-3B	Zinc	26.6	mg/kg
B6-CA-1B	Zinc	37.7	mg/kg
B4-CA-1B	Zinc	37.9	mg/kg
COMP (B2-CA-3B, B2-CA-4)	Zinc	41.6	mg/kg
COMP (B1-CA-1B, B1-CA-2B)	Zinc	53.4	mg/kg
B3-CA-4B	Zinc	78.6	mg/kg
COMP (B6-CA-3, B6-CA-4)	Zinc	93.3	mg/kg
B5-CA-1B	Zinc	94.6	mg/kg
COMP (B2-CA-1B, B2-CA-2B)	Zinc	107	mg/kg
COMP (B3-CA-2B, B4-CA-2B, B6-CA-2B)	Zinc	112	mg/kg

lead, these concentrations were also below ten times the STLC and below twenty times the TCLP hazardous waste criteria, where designated, as shown on Table 1.

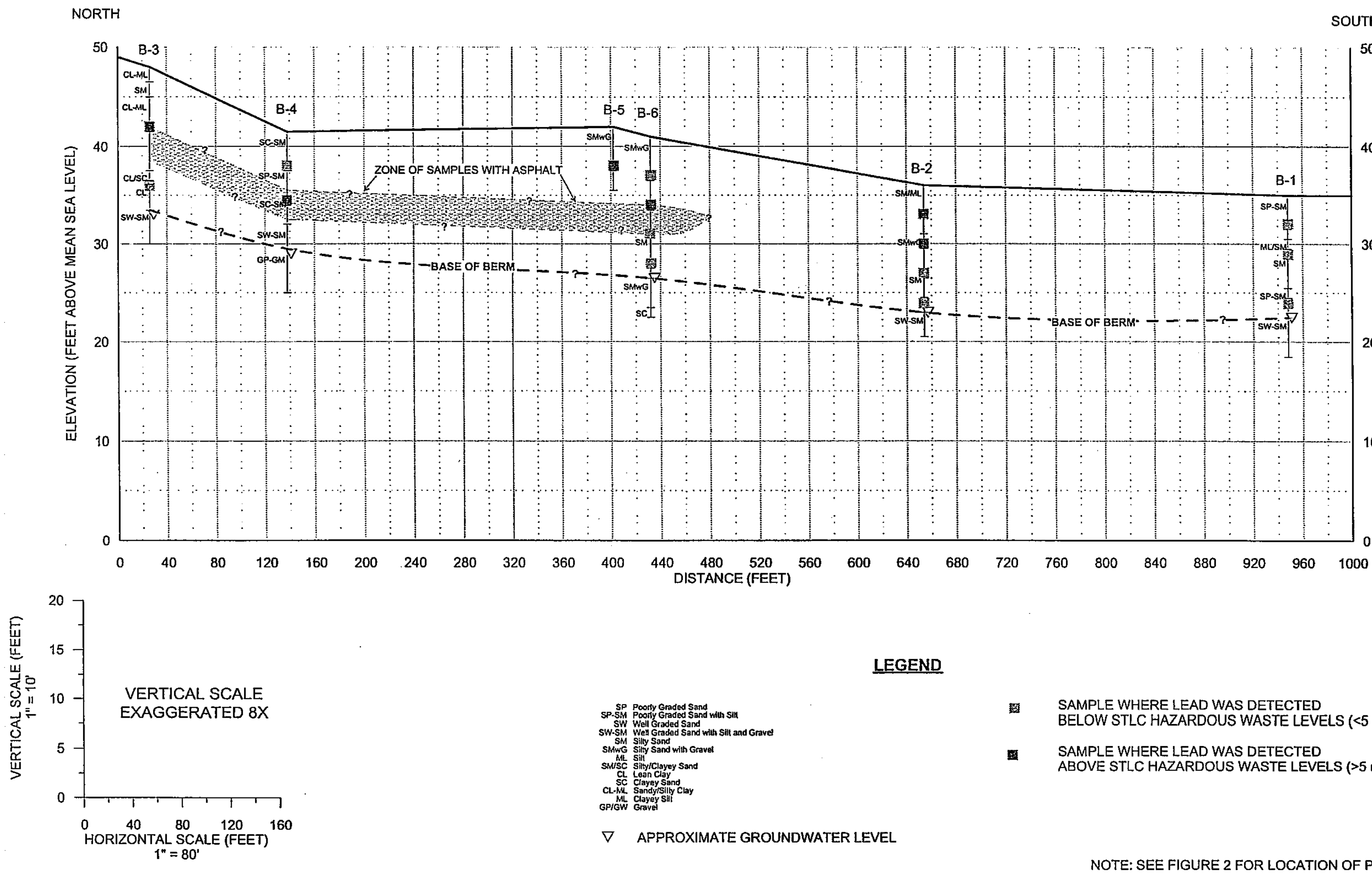
As shown on Table 4, lead was detected in TTLC concentrations between 95.9 mg/kg and 163 mg/kg in samples COMP(B2-CA-1B, B2-CA-2B), COMP(B3-CA-2B, B4-CA-2B, B6-CA-2B), B5-CA-1B, and COMP(B6-CA-3, B6-CA-4). Because these lead concentrations were above 10 times the STLC and above 20 times the TCLP, these samples were tested for lead using STLC and TCLP procedures. The results of the STLC and TCLP tests for lead are presented in Table 5, and shown graphically on the profile on Figure 5. As shown on Table 5, lead was not detected in concentrations above 0.100 mg/L (detection limit) using TCLP procedures. However using STLC procedures, lead was detected in concentrations above hazardous waste levels (5 mg/L) in samples COMP(B2-CA-1B, B2-CA-2B), COMP(B3-CA-2B, B4-CA-2B, B6-CA-2B), and B5-CA-1B with a maximum STLC lead concentration of 6.17 mg/L. Because lead was detected below federal (TCLP) hazardous waste levels and above California (STLC) hazardous waste levels, this soil is considered non-RCRA, California hazardous waste for disposal purposes.

As shown on Figure 5; it appears the hazardous waste lead contamination is laterally continuous across the majority of the berm, with the exception of borehole B-1, which did not contain lead above hazardous waste levels. It also appears that the hazardous waste lead contamination is located within the upper approximately 8 feet of the berm.

It is possible that the lead contamination may be related to the source of the berm fill. Since at least a portion of the fill was imported from road demolitions or from soil adjacent to roads, it is likely that these materials were contaminated with lead prior to being imported and placed on the berm. The major source of lead in and around roads is due to the previous application of lead in gasoline. The lead is burned and enters the environment through the cars exhausts. The lead particles drop to the ground immediately and accumulate along and adjacent to the road.

TABLE 5
LEAD CONCENTRATION USING STLC AND TCLP TEST PROCEDURES

SAMPLE ID	CONCENTRATION		UNITS
	TCLP	STLC	
COMP(B2-CA-1B, B2-CA-2B)	<0.100	5.35	mg/L
B5-CA-1B	<0.100	6.07	mg/L
COMP(B6-CA-3, B6-CA-4)	<0.100	1.9	mg/L
COMP(B3-CA-2B, B4-CA-2B, B6-CA-2B)	<0.100	6.17	mg/L



LEGEND

SP Poorly Graded Sand
SP-SM Poorly Graded Sand with Silt
SW Well Graded Sand
SW-SM Well Graded Sand with Silt and Gravel
SM Silty Sand
SMwG Silty Sand with Gravel
ML Silt
SM/SC Silty/Clayey Sand
CL Lean Clay
SC Clayey Sand
CL-ML Sandy/Silty Clay
ML Clayey Silt
GP/GW Gravel

▽ APPROXIMATE GROUNDWATER LEVEL

SAMPLE WHERE LEAD WAS DETECTED BELOW STLC HAZARDOUS WASTE LEVELS (<5 mg/L)

SAMPLE WHERE LEAD WAS DETECTED ABOVE STLC HAZARDOUS WASTE LEVELS (>5 mg/L)

NOTE: SEE FIGURE 2 FOR LOCATION OF PROFILE

GeoPentech	Project: RODEO GROUNDS BERM STUDY	Project No.: 05015A	GEOLOGIC PROFILE SHOWING DISTRIBUTION OF LEAD CONCENTRATION	Date: APR. 2005	Figure: 5

5.0 BERM FILL DISPOSAL OPTIONS AND COSTS

5.1 Approximate Disposal Volume and Weight

The total surface area of the trapezoidal Rodeo Grounds berm (from toe to toe) is approximately 80,000 ft^2. The total depth to the base of the berm based on the boreholes ranges between 12 and 14.5 feet below ground surface for an average of about 13 feet. The approximate volume of the berm fill is approximately the surface area of the berm multiplied by the berm depth divided by about two (because the berm is trapezoidal – not rectangular) or approximately 520,000 ft^3 (~19,000 yd^3). Assuming a unit weight of the berm fill soil of approximately 100 pounds per cubic foot, the total weight of the berm is approximately 26,000 tons.

At least a portion of the fill material is composed of non-RCRA, California hazardous waste. For the purposes of this evaluation, it is estimated that approximately two-thirds of the berm fill contains non-RCRA, California hazardous waste material, or approximately 17,000 tons. A more exact estimate of the quantity of hazardous waste material can be achieved by performing additional boreholes and chemical tests.

5.2 Disposal Options

It is envisioned that during berm removal that the hazardous and non-hazardous waste materials be stockpiled separately, and be disposed of at the appropriate facility that will accept the classified waste. Fill classified as non-hazardous will be accepted at minimal fees at the municipal landfill facilities operated by the Los Angeles County Sanitation District, for example the Puente Hills or Shoal Canyon landfills. It is noted that these landfills may have daily and weekly restrictions on the quantity of material that they accepted; therefore, it may be required that more than one landfill option be available.

Non-RCRA, California hazardous waste will not be accepted by the facilities operated by the Los Angeles County Sanitation District, and therefore, will be required to be disposed at a facility that will accept this waste. Appropriate facilities which have been identified include the Mecca II landfill in Riverside County, CA; the Kettleman Hills Facility in Kings County, CA; and the La Paz County Landfill in La Paz County, AZ.

5.3 Approximate Disposal Costs

Order of magnitude costs to transport and appropriately dispose of the fill material have been estimated based on discussions with various waste haulers. The unit rates have been approximated for hazardous and non-hazardous waste disposal; therefore, these costs may vary depending on the actual quantities of hazardous and non-hazardous fill materials found. For the purposes of this report, a total of 9,000 tons of non-hazardous and 17,000 tons of non-RCRA, California hazardous waste have been estimated. Based on this estimate, the approximate costs associated with hauling and disposal of the fill material are shown on the table below.

Material Classification	Approximate Weight (tons)	Approximate Transport and Disposal Rate ($/ton)	Approximate Cost ($)
Hazardous	17,000	65 to 70	1,105,000 to 1,190,000
Non-Hazardous	9,000	14 to 15	126,000 to 135,000
		APPROXIMATE TOTAL COSTS:	**$1,231,000 to $1,325,000**

The approximate total costs to haul and dispose of the berm fill material ranges between approximately $1,231,000 and $1,325,000. Again, these costs may vary depending on the actual hazardous versus non-hazardous materials identified. These costs include the majority of the expenses expected for the berm removal; however other costs associated with excavating and loading of the material, additional chemical testing, and site supervision were not taken into account. These additional costs may add an additional 10% to the total costs.

5.4 Berm Removal Plan

The following is an outline of a potential plan to remove the berm.

1. Prior to berm excavation, approximately 1 to 2 days of additional drilling and sampling would be performed throughout the berm. It is estimated that approximately 20 additional samples at approximately $250 per sample would be chemically tested to supplement existing data to better delineate the location of the lead contaminated

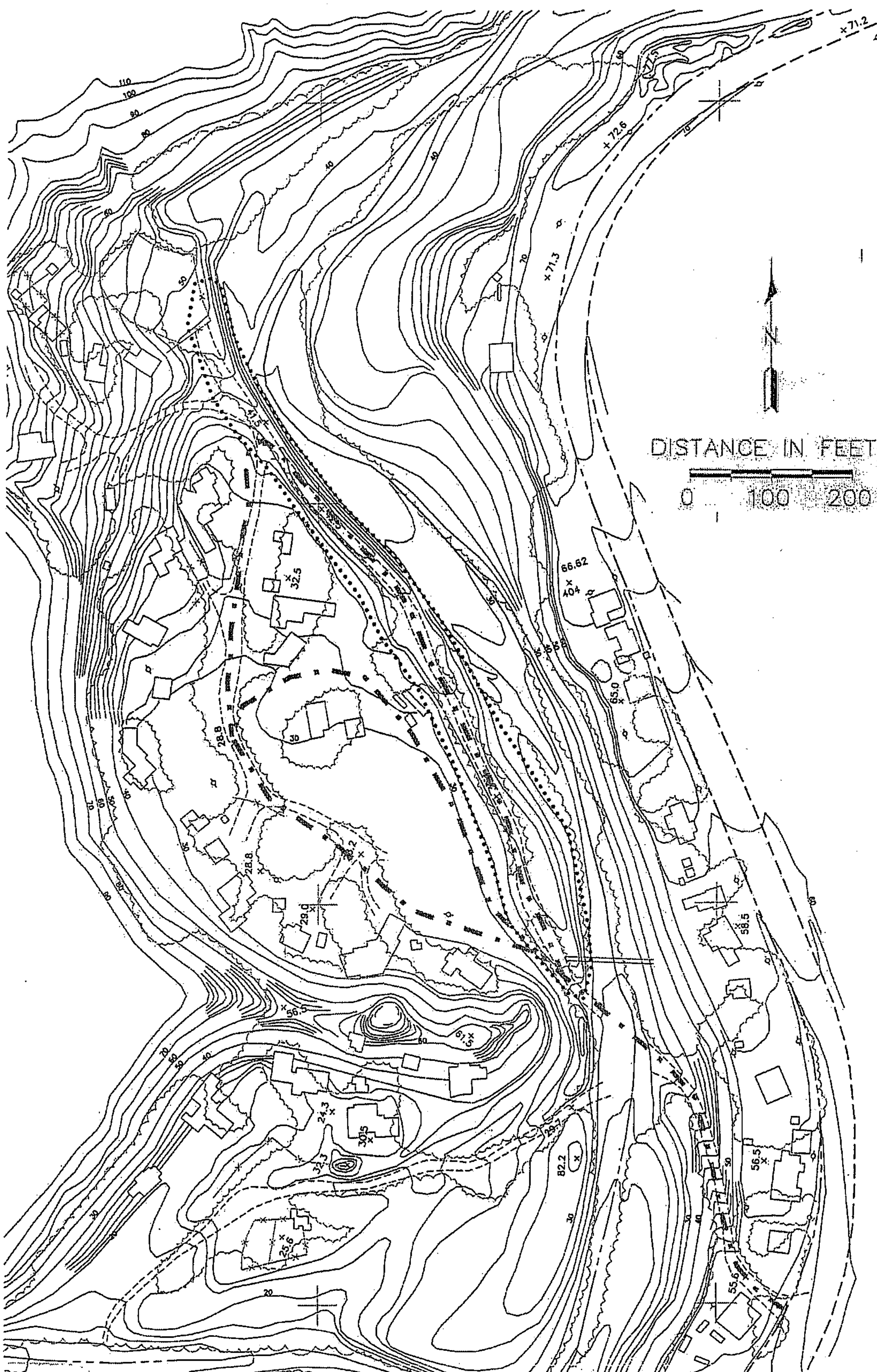
soil. The results would be used to more accurately identify the location of the hazardous and non-hazardous materials to satisfy regulatory requirements for appropriate disposal.

2. Mobilize excavation and loading equipment, which may include bulldozers, excavators, and loaders, to site. Prepare haul roads for haul truck access. Potential haul roads are shown on Figure 6. The proposed southern haul road follows the old road bed which has been covered by invasive exotic vegetation that will be removed. The existing dirt driveways will also be used as needed.

3. Excavate and load berm material onto haul trucks for transport and disposal. Excavation and removal of the berm will most likely proceed in layers from north to south. Block sections of berm material predetermined to be hazardous or non-hazardous from the sampling and testing program will be loaded and disposed separately. For example, based on the preliminary distribution of hazardous waste lead contamination shown on Figure 5, it appears that the upper 8 feet of berm is considered hazardous waste starting at the north end of the berm for a distance of approximately 700 feet. Based on this distribution, this hazardous material block would be removed first leaving the non-hazardous material, which would be removed last. Approximately 50 additional samples at approximately $50 per sample would be collected within the non-hazardous material prior to loading and transport to satisfy regulatory requirements for disposal. Also, the area within the protected root zone of the mature cottonwood tree on the berm may have some restrictions once excavation reaches that area, and it is determined if the tree can be salvaged or not.

   The proposed haul trucks would be able to transport approximately 24 tons of material per truck trip. Assuming approximately 26,000 tons of material, the berm removal requires approximately 1,100 truck trips to complete. Assuming approximately 50 truck trips per day, the berm excavation and removal will require approximately 22 working days to complete.

4. In the event that stockpiles of excavated berm material are left onsite, the stockpiles would be covered with plastic for erosion control. Stockpiling locations are nearby at the former Caltrans staging area on Topanga Canyon Blvd., located approximately a quarter mile north of the project site on the road shoulder.



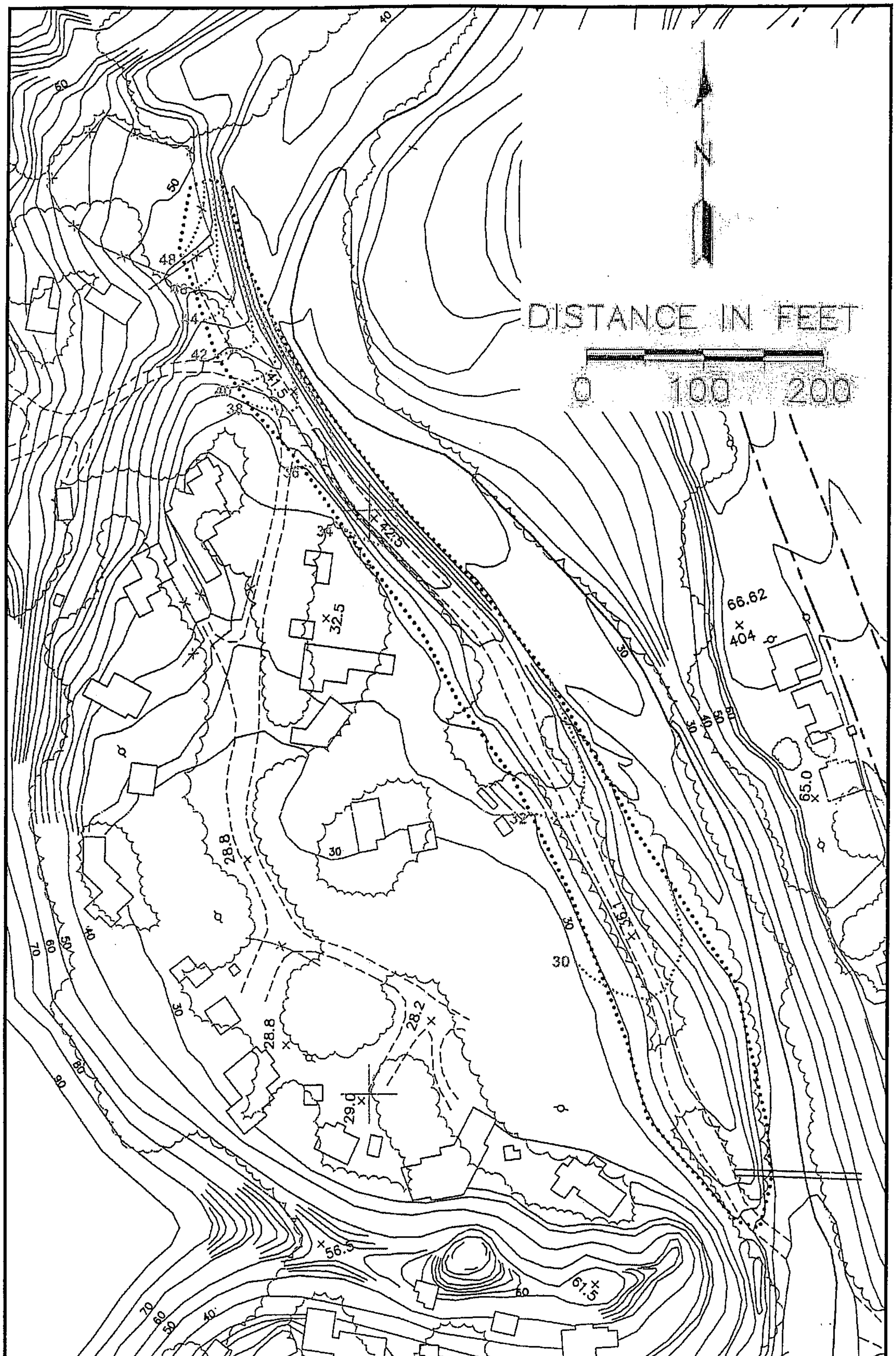
LEGEND

·········· Approximate Berm Extents	▬ ▪ ▬ Potential Haul Route

GeoPentech	POTENTIAL HAUL ROUTES	PROJECT: RODEO GROUNDS BERM STUDY	
		PROJECT #: 05015A	DATE: APR. 2005 · FIG: 6

5. Erosion control measures will be installed during excavation to protect the creek channel from sedimentation or possible leaching of lead contaminated soils. These measures may include, but are not limited to, visquine barriers, erosion control fabric barriers and/or plastic covers.

6. After the berm has been removed, the berm footprint will be graded to match the approximate final grade configuration shown on Figure 7. The entire berm footprint would then be re-vegetated with native vegetation. The north end of the excavation area will be contoured to match the slope of the adjacent hillslope, stabilized with erosion control fabric and revegetated using riparian species approved by CA Department of Parks and Recreation, as well as meet any mitigation requirements for the CA Department of Fish and Game.



LEGEND

Approximate Berm Extents ....30.... Approximate Final Grade Contour with contour elevation

GeoPentech	APPROXIMATE FINAL GRADE MAP	PROJECT: RODEO GROUNDS BERM STUDY		
		PROJECT #: 05015A	DATE: APR. 2005	FIG: 7

CleanHarbors
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Clean Harbors Environmental Services, Inc.
Remediation and Environmental Construction Division
2500 East Victoria Street
Compton, CA 90220
310.764.5851
www.cleanharbors.com

October 11, 2005

Ms. Rosi Dagat
Sr. Conservation Biologist
Resource Conservation District of the Santa Monica Mountains
122 N. Topanga Canyon Boulevard
Topanga, CA 90290

Ref: **Re: Rodeo Grounds Berm Removal Project**

Dear Ms. Dagat,

I would like to thank you for the opportunity to visit the Topanga State Park. It is truly a beautiful place. The passion you exude for the environment is extremely infectious and provides additional motivation to work with you on restoring this natural creek back to its rightful condition. During our visit, you expressed interest in obtaining some additional details with regard to project specifics. In an effort to meet your needs I have prepared the following comments.

After reviewing your initial scope of work, additional considerations should be given to your on-site transportation route, stockpile/load-out area, and sampling.

On-Site Transportation

The concept of a loop providing circular ingress/egress to the excavation area is well conceived for the removal of the berm. A dozer would be used to clear the pathway for this route. Due to the steep gradient of the existing road, material should be taken to a staging area for a more efficient and safer load-out. The excavation should proceed expeditiously with two excavators to load two thirty-ton articulating dump trucks at a time. Depending on cycle times, staging area space, sampling analytical turnaround, etc the material can be staged within three weeks. Water trucks would be needed to moisten the roads and reduce dust. (A flag person may be considered at the southern end of the truck loop that may become a bottleneck.)

Inner Transport Road

To avoid accessing any public roadways during the initial soil transport phase, an internal transport route, north of Topanga Canyon Road (running west to east), should be considered. This would allow for additional stockpile space, enhanced stockpile sampling and characterization while reducing intrusive impact to the adjacent public access road. High visible traffic fencing in conjunction with dust protective barriers and controls should be installed along the southern boundary (downhill gradient side) of the road.

Staging Area and Loadout

Once the stockpile sampling sizes, sampling turnaround times, transportation and disposal schedules, etc. have been identified, the size of the staging area can be determined. The staging area should be protected with a 40-mil poly sheeting or equivalent to prevent contamination from spreading to areas designated as clean. The construction of the inner road would also assist with moving truck loading operation towards the north and away from the shoulder of main access road. Please note that a traffic flag person should be considered to assist with metering the trucks in and out of the loading area. They would also provide for a safe navigation route onto the public access road. Two excavators/loaders may be utilized to load out the different types of material (CA Haz/Non-Haz). A decontamination pad, with wet decontamination capability, consisting of steel tread plates, sumps, pumps, brushes, hand wash, etc should also be implemented. Thoughts should be given to setting up a weighing operation. This would avoid overloading trucks, potentially receiving fines, excessive trans-loading costs, and reduce liability. Silt fencing may also be required to encapsulate stockpile areas.

Additional Pre-testing Characterization Sampling

Another item that may be considered would be to expand the delineation and characterization beyond the six borings that currently exist. This may prevent inadvertent mixing of potential non-hazardous material with lead impacted (CA Hazardous) material during stockpiling activities. This may yield significant reduction of overall projects costs. A pre-approved grid system by a regulatory agency may assist with this endeavor. Pre-profiling by sending a sample, in advance, to the identified disposal outlets is always a good idea. This will ensure that the waste streams have been adequately characterized and avoid any complications ahead of time.

Demolition Activities

During demolition activities, please make consideration to power supply (generators could be used) and water supply for dust control. Even though the area is semi-remote, residential structures are present, and consideration should be made to providing a utility survey/mark-out, especially if no utility drawings are available. It is imperative to ensure complete disconnect of gas/water/electric/sewer, etc. This should be performed prior to demolition activities. Prior to any excavation/demolition Dig Safe should be contacted.

Please note that Clean Harbors Environmental Services, through its' Remediation and Environmental Construction Division, has demonstrated experience, appropriate licenses and insurance to remediate all material required for the removal of the berm as well as post restoration of the site back to desired grade. In addition, Clean Harbors owns and operates a subtitle C landfill that can handle the CA Hazardous lead impacted material.

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We can offer you tremendous value and efficiency by handling all facets of this project in a turnkey fashion. We are extremely interested in providing you with a competitive bid. Our statement of qualification package is available upon request.

Obviously there are a lot more considerations that can be made but hopefully I have addressed some of the issues we discussed during our site visit. Please feel free to contact me @ (310) 764-5851 Ext 201, if you have any additional questions.

Sincerely,

Michael S. Gray
Manager – West Coast Operations
Clean Harbors Environmental Services, Inc.
Remediation and Environmental Construction Division

APPENDIX F
Hydrology

Appendix F, Table 1
Hydrologic Modeling Results

Water Level and Velocity at Rodeo Grounds Concrete Levee						
902.48 m from North of PCH						
			Existing		**Proposed**	
Storm Events	**Peak Flow (cfs)**	**Return Period (yr)**	***Velocity (m/s)***	**Water Level (m, MSL)**	***Velocity (m/s)***	**Water Level (m, MSL)**
02/16/80	391	83	***2.2***	12.6	***2.1***	12.4
01/27/83	289	20	***2.0***	12.1	***1.9***	11.9
01/10/01	80	4	***1.5***	11.4	***1.4***	11.2
02/23/98	70	3.3	***1.5***	11.3	***1.3***	11.1
02/23/00	30	2	***1.1***	11.0	***0.9***	10.8
04/11/99	3	1	***0.4***	10.5	***0.4***	10.4
2961 ft from North of PCH						
			Existing		**Proposed**	
Storm Events	**Peak Flow (cfs)**	**Return Period (yr)**	***Velocity (fps)***	**Water Level (ft, MSL)**	***Velocity (fps)***	**Water Level (ft, MSL)**
02/16/80	13800	83	***7.2***	41.3	***6.8***	40.8
01/27/83	10200	20	***6.6***	39.8	***6.4***	39.2
01/10/01	2820	4	***5.0***	37.3	***4.5***	36.6
02/23/98	2470	3.3	***4.8***	37.1	***4.3***	36.4
02/23/00	1050	2	***3.6***	35.9	***3.1***	35.3
04/11/99	93	1	***1.4***	34.5	***1.3***	34.2
Excerpted From: Topanga Creek Watershed and Lagoon Restoration Feasibility Study (2002)						

Concrete Levee at the Rodeo Grounds

Problem description: Following the 1980 flood, tenants filled the creek and constructed a concrete covered levee 25 feet wide, 20 feet high and over 200 feet long along a meander within the floodplain to protect their homes from flooding. The un-permitted levee encroaches significantly into the creek floodway and constrains the cross-section. As a result, the creek has eroded its bed and is actively undermining the concrete bank, threatening it with failure as shown in Figure 3-7. It has also redirected the main thalweg eastward, destabilizing that bank and completely disrupting the natural floodplain condition.

Proposed solution: The levee should be removed if the residences are removed. The creek cross-section would then be significantly enlarged to restore the historic floodway at this location. From historic topographic maps, the meander appears to have originally been at the location of the homes. Removal of the levee should be done during late summer or early fall, when potential for disturbing local amphibians or fishes is minimized. Concurrently, the stands of *Arundo donax* that have overtaken the native willows in that area should be mechanically removed.

Topanga Creek Restoration Feasibility Study Recommendations

Recommendations are provided below based on engineering work completed for the project.

1. Implement upstream improvements along Topanga Creek to improve flood protection, habitat quality, maintain traffic circulation, improve public safety and reduce emergency costs. Improvements should be implemented at Lake Topanga, Topanga School Road, boulder dams, the Narrows, the landslides, the Rodeo Grounds and the lagoon/PCH bridge.

2. Implement a lagoon restoration to improve the environment, and provide better flood and sediment conveyance to the sea to benefit the coast.
   A. The superior lagoon alternative based on modeling and analyses is the 15.5-acre wetland, 8 acre lagoon, with a 490-foot-long bridge, and relocated highway to the south (Alternative concept 4). This concept alternative most closely replicates the historic condition, provides the maximum amount of habitat restoration, significantly increases recreational opportunities, and potentially provides the greatest improvements to water quality. It will provide an optimal aesthetic and educational experience for residents of the highly urbanized Los Angeles area. In addition this alternative will substantially increase the opportunity for successful recovery of endangered Steelhead Trout and Tidewater Gobies. This concept alternative costs more than the others to construct, monitor/maintain and causes impacts by relocating and reducing available parking. It will also require the relocation of historically significant buildings (Wylies Bait Shop and possibly one or two of the small units of the Topanga Ranch Motel). This concept alternative most closely supports the goals identified in the Lower Topanga State Park Interim Plan.
   B. The other concept alternative that clearly improves environmental conditions at the lagoon is a 10.5 acre wetland, 6-acre lagoon, with a 340-foot-long bridge and relocated highway to the south (Alternative concept 3). This concept alternative will provide many benefits, but the retention of the vertical bank on the east side will prevent optimal restoration of natural processes. This concept alternative does not optimize the opportunity to convey floods and sediments. It would not cost as much as Alternative concept 4, nor would it provide as much benefit.
3. Initiate permitting and environmental review of the preferred lagoon alternative concept and upstream improvements. If possible, secure permits and complete environmental review of all improvements as one Master Plan for the creek.
4. Initiate final engineering design for construction as permitting and environmental review are being concluded. The final engineering will incorporate permit conditions and mitigation measures identified as necessary during the permitting and environmental review stage.
5. Continue to pursue all possible funding opportunities to finance project planning, engineering and construction.

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 MAIN STREET, SUITE 100
LOS ANGELES, CA 90012-3606
PHONE (213) 897-0362
FAX (213) 897-0360
TTY (213) 897-4937

Flex your power!
Be energy efficient!

August 24, 2006

Ron Schaffer
Los Angeles District Superintendent
California Department of Parks and Recreation
1925 Las Virgenes Road
Calabasas, CA 91302

Dear Mr. Schaffer:

The California Department of Transportation (Caltrans) has completed its review of the technical reports used to evaluate the impacts of the Topanga Creek Watershed and Lagoon Restoration Plan Feasibility Study. As you know, our staff has also reviewed the Mitigated Negative Declaration for the current project. Caltrans staff of biologist, hydraulics engineers and structural engineers evaluated the project implications and focused specifically on the planned removal of the Rodeo Ground Berm.

Topanga Creek Bridge, # 53-0035 original construction date is 1932. This structure is a 2 span RC slab with a RC closed end rigid frame abutments and pier bents. This structure is supported on untreated Douglas fir piles. The channel invert is concrete lined. All calculated scour is above the existing footings.

For the proposed watershed restoration project, a berm placed approximately 600 to 900 meters upstream of the existing bridge is to be removed. The present slopes in this reach are approximately 1 to 2 percent, yielding velocities of about 3.3 m/s. This velocity will increase slightly when the berm is removed. The slope gradient changes to less than 1 percent within 500 meters upstream of the bridge site. As the gradient flattens out the sediment will start to deposit.

Based on the review of the Feasibility Study, our Stucture Maintenace Records and As-Built Plans, we have determined that the effects of removing the berm are negligible to our structure on the Pacific Coast Highway. This is due to the concrete channel paving on the invert and the transition length of the slope gradient. No excess sedimentation is expected due to berm removal.

We appreciate the fact that you have shared the views of those individuals who had concerns about this important bridge. We also appreciate your patience regarding our response.

Sincerely,

RON KOSINSKI
Deputy District Director, Environmental Planning
District 7

cc: Rosi Dagit, Resource Conservation District of the Santa Monica Mountains

APPENDIX G
Transportation/Traffic

Katz, Okitsu & Associates
Planning and Engineering

September 19, 2006

1055 Corporate Center Dr., Suite 300
Monterey Park, CA
91754-7642
323.260.4703
fax: 323.260.4705
koala@katzokitsu.com
www.katzokitsu.com

Ms. Rosi Dagit
Resource Conservation District of the Santa Monica Mountains
122 N. Topanga Canyon Boulevard
Topanga, CA 90290

ja6232

Subject: Traffic Control Plans for Rodeo Grounds Berm Removal

Dear Ms. Dagit:

Construction traffic for the removal of the Rodeo Grounds Berm will be handled as follows:

Trucks will haul materials from the site by way of Pacific Coast Highway (Route 1) through the McClure Tunnel to the Santa Monica Freeway (Interstate 10) and by way of Topanga Canyon Boulevard (Route 27) over the Santa Monica Mountains to the Ventura Freeway (US 101). An estimated 726 outbound truck loads will use Pacific Coast Highway and Interstate 10, carrying approximately 17,160 tons, some of which may be hazardous materials. An estimated 374 outbound truck trips will be made by way of Topanga Canyon Boulevard over the Santa Monica Mountains, carrying approximately 8,840 tons, none of which may be hazardous materials.

Inbound empty trucks arriving at the site via Pacific Coast Highway will turn right onto Topanga Canyon Boulevard and park on the east side of the road. Parking will be prohibited along the east shoulder of Topanga Canyon Boulevard, south of the Rodeo Grounds entrance. Inbound empty trucks arriving from the north along Topanga Canyon Boulevard will park on the west shoulder, north of the Rodeo Grounds entrance. Flaggers, i.e. employees stationed at the entrance carrying a "Stop/Slow" paddle, will hold up traffic on Topanga Canyon Boulevard to allow trucks to turn in. Outbound trucks, whether turning right toward Pacific Coast Highway or turning left to head up Topanga Canyon, would be assisted by flaggers while exiting. To avoid traffic impacts caused by caravans of trucks, a concern raised by Caltrans District 7's IGR/CEQA Branch in their letter dated January 18, 2006, flaggers should allow outbound trucks to exit at 2-minute minimum headways, which would be roughly one truck for each cycle of the traffic signal at Pacific Coast Highway and Topanga Canyon Boulevard.

San Diego
619.683.2933
fax: 619.683.7982

Tustin
714.573.0317
fax: 714.573.9534

Ontario
909.890.9693
fax: 909.890.9694

Oakland
408.608.7707
fax: 408.225.3971

The plans labeled TH-1 and TH-2 depict the traffic handling of trucks adjacent to the site and the truck hauling routes, respectively. Caltrans District 7's Office of Traffic Investigations stated in their letter dated September 13, 2006 that two flaggers, one for each direction, shall be onsite at all times during the Hours of Operation. Their letter also stated that plan TH-1 should provide a C9A (CA) "Flagger" sign and a W3-4 "Be Prepared to Stop" sign for southbound, and a C9A (CA) "Flagger" sign for northbound Topanga Canyon Boulevard. They requested a requirement that entering trucks not block traffic lanes. Plan TH-1 is intended as a conceptual-level plan, only. A detailed plan that addresses these comments should be provided as part of the contractor's permit process.

The Caltrans District 7 letter of September 13, 2006 also mentioned that "it is preferable that all the hauling truck traffic be routed by way of Pacific Coast Highway (Route 1) rather than Topanga Canyon Boulevard (Route 27) due to the roadway geometrics, such as curves, narrow width, etc., of Topanga Canyon Boulevard." Only those Rodeo Grounds trucks with sufficient power and lighter loads will use the Topanga Canyon Boulevard route. All other trucks, and those with hazardous materials, will use the Pacific Coast Highway route.

The Caltrans September 13, 2006 letter also mentions that a road widening and resurfacing project for Topanga Canyon Boulevard that will be completed March 30, 2007 may cause delays for the trucks. The Rodeo Grounds berm removal is scheduled to take place after March 30, 2007, so the widening and resurfacing project would not cause traffic delays to hauling operations.

Walter Okitsu, Professional Engineer
(Calif. Regis. Civil 52655, Traffic 1406)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	1	XX.X-XX.X	1	2

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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Katz, Okitsu & Associates
1055 Corporate Center Drive, Suite 300
Monterey Park, California 91754-7642

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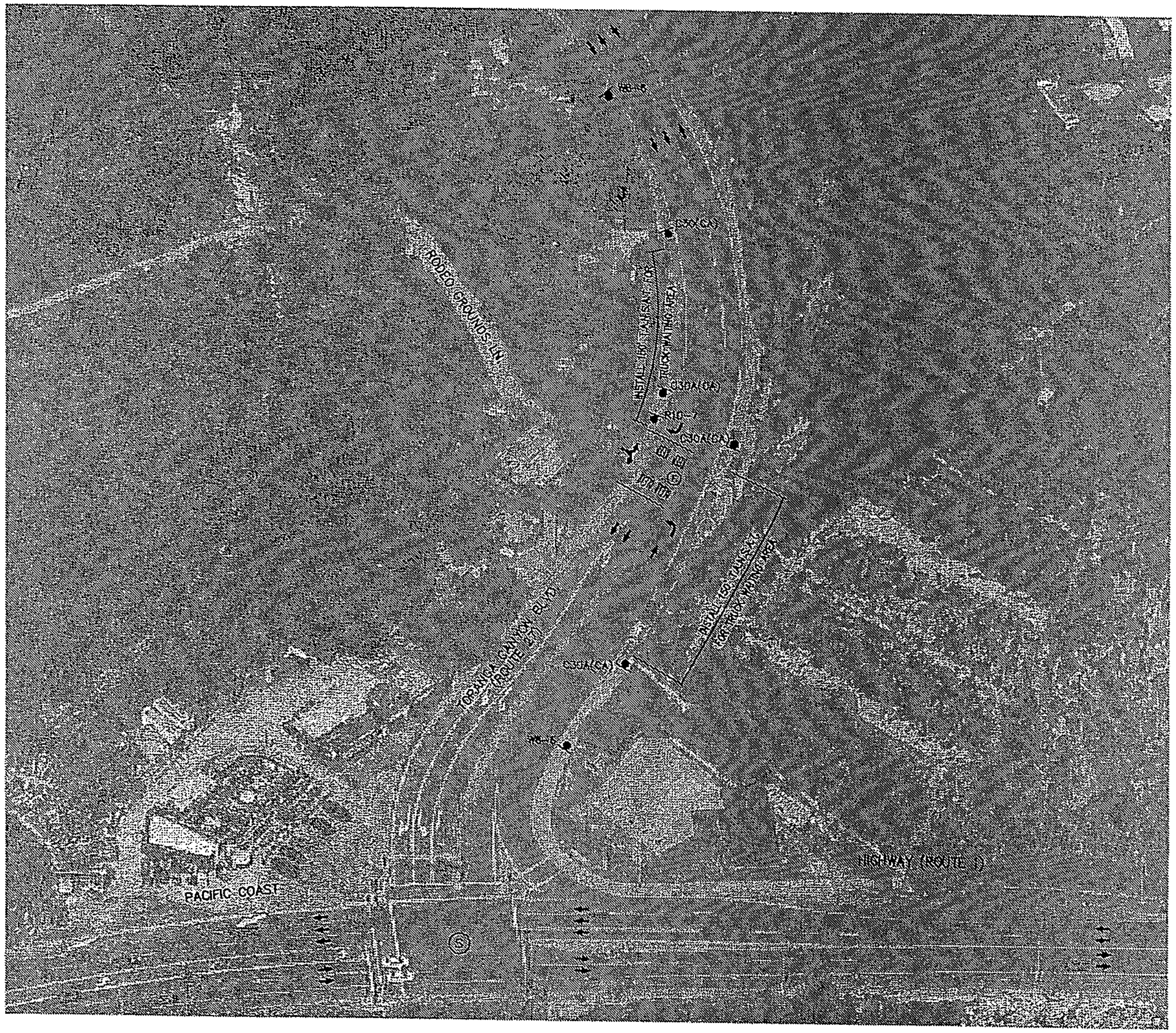

LEGEND
- (F) FLAGGER
- (S) SIGNALIZED INTERSECTION
- ← DIRECTION OF TRAVEL
- TEMPORARY TRAFFIC SIGN

SHOULDER CLOSED

C30A(CA)

TRUCK CROSSING

W8-6

DO NOT BLOCK INTERSECTION

R10-7

THIS PLAN IS ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

TRAFFIC HANDLING PLAN
PACIFIC COAST HIGHWAY AT TOPANGA CANYON BOULEVARD
SCALE = N.T.S.

TH-1

CU XXXXXX | EA XXXXXX

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN OVERSIGHT	CALCULATED/ DESIGNED BY	DATE	REVISED BY
Caltrans	XX	CHECKED BY		DATE REVISED

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	1	XX.X-XX.X	2	2

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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1055 Corporate Center Drive, Suite 300
Monterey Park, California 91754-7642

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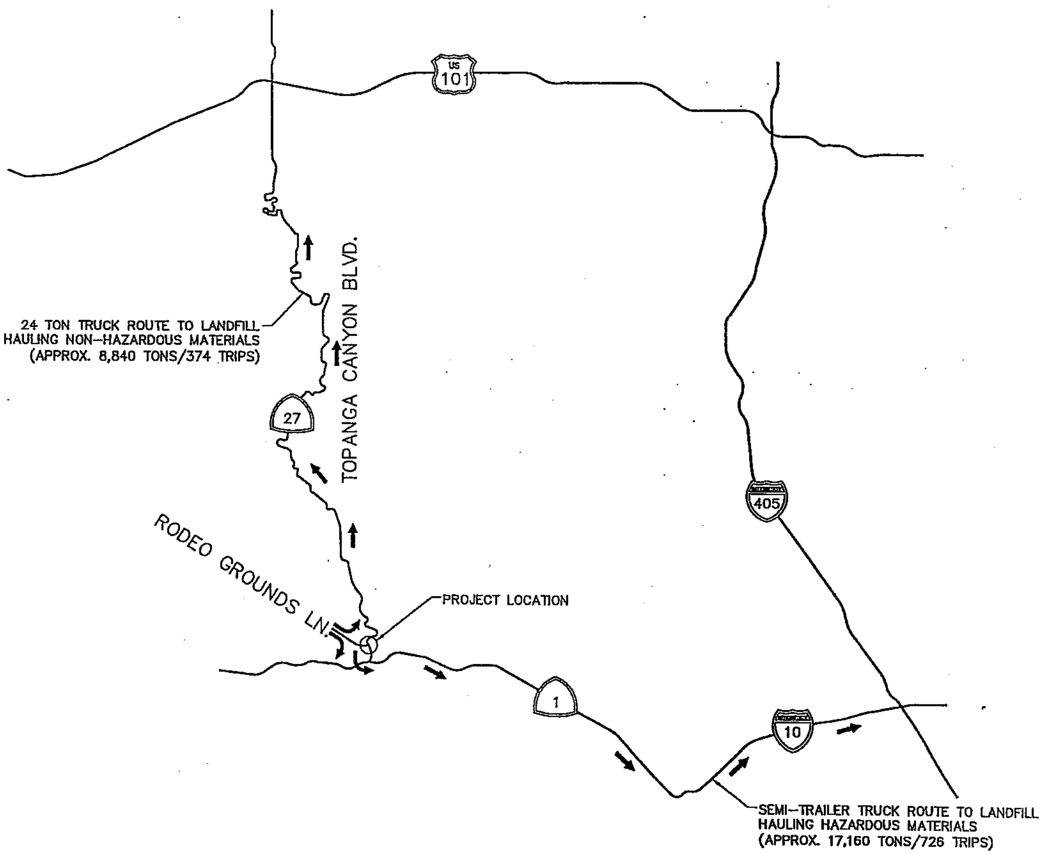

LEGEND

← DIRECTION OF TRAVEL

HOURS OF OPERATION

MONDAY-FRIDAY (9AM-3PM) 40 DAYS MAX.

THIS PLAN IS ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

TRUCK HAUL ROUTE PLAN
PACIFIC COAST HIGHWAY AT TOPANGA CANYON BOULEVARD
SCALE = N.T.S.

TH-2

CU XXXXXX | EA XXXXXX

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

DESIGN OVERSIGHT: XX

CALCULATED/DESIGNED BY

CHECKED BY

DATE

REVISED BY

DATE REVISED

State of California   Business, Transportation and Housing Agency

Memorandum

To: Syed Huq
Project Manager

Date: September 13, 2006

From : Sheik Moinuddin
Senior Transportation Engineer
Office of Traffic Investigations

File: Topanga Cyn Blvd (Rte 27)
Rodeo Grounds Berm Office
'Removal
IGR/CEQA # 060119/EK

Subject: Comments on Traffic Control Plan

Per your e-mail, dated 9/7/2006, the following are comments from Office of Traffic Investigations for the Traffic Control Plan submitted by Parks and Recreations for their project to remove a berm at Rodeo Grounds at Topanga Creek.

1. It is preferable that all the hauling truck traffic be routed by way of Pacific Coast Highway (Route 1) rather than Topanga Cyn Blvd (Route 27) due to the roadway geometrics, such as curves, narrow width, etc., of Topanga Cyn Blvd. Also, a project to widen and resurface the roadway from Pacific Coast Highway to Mulholland Dr is currently under construction. Lane closures are performed using reversible control. Therefore, delays are common. This project is scheduled to be completed March 30, 2007. If the Rodeo Grounds Berm removal project is scheduled within the same time, the delays may be excessive, both for the trucks and the everyday motorists.
2. All work shall be conducted during the Hours of Operation, as shown on TH-2.
3. Two (2) flaggers shall be onsite at all times during the hours of operation, (one for each direction of travel).
4. All trucks waiting to enter Rodeo Grounds Ln shall not block traffic lanes.
5. In addition to the proposed signs as shown on TH-1, please post a C9A (CA), Flagger, and a W3-4, Be Prepared to Stop signs for southbound Topanga Cyn Blvd, and a C9A (CA), Flagger sign for northbound Topanga Cyn Blvd.

Should you have any questions, please call Wayne Liu at extension 7-5742, or Rosie San Juan at extension 7-3499.

SHEIK MOINUDDIN
Senior Transportation Engineer
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