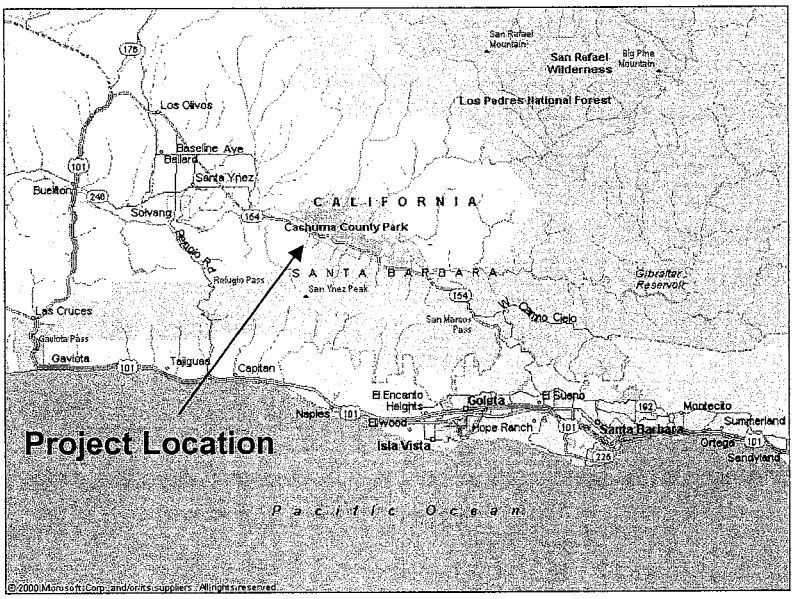
SANTA BARBARA COUNTY PARKS

FINAL
MITIGATED NEGATIVE DECLARATION
07NGD-00000-00008
Cachuma Lake Boat Launch Ramp Facility



Santa Barbara COUNTY PARKS

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COUNTY OF SANTA BARBARA
SANTA BARBARA COUNTY PARKS
FINAL MITIGATED NEGATIVE DECLARATION
FOR CACHUMA LAKE
PROPOSED BOAT LAUNCH RAMP FACILITY

1. PROJECT DESCRIPTION

PROJECT PURPOSE AND NEED

The Santa Barbara County Parks Department is proposing that the three existing deteriorated boat launch ramps at Cachuma Lake be replaced with one new boat launch ramp covering the normal operational water levels of the lake. Funding for the project has been secured in the form of a grant from the California Department of Boating and Waterways. The facility improvements will consist mainly of five new boat launch lanes, two boarding float docks, additional access routes and other amenities. The project improvements will add to the overall efficiency of the facility to better serve boaters, and the new boat launch ramp will be accessible per the Americans with Disabilities Act (ADA) Accessibility Guidelines for Recreation Facilities.

The ramp will be constructed in two phases as the water level in the lake permits. The new boat launch ramp facility will be designed for minimal impact to sensitive habitat and native oak trees, and to meet California Department of Boating and Waterways guidelines according to the *Layout, Design and Construction Handbook for Small Craft Boat Launching Facilities*. The improvements to the existing deteriorated boat launch facilities are for the direct benefit of the public. The improvements are anticipated to increase the efficiency of the boat launch facility and better support community events such as sailing regattas and fishing tournaments.

The proposed launch ramp, as well as drainage structures, access routes and paved parking areas, will be designed to an elevation that will allow the facility to remain functional at a higher maximum operational lake level. The Santa Ynez Fish Management Plan Environmental Impact Report/Environmental Impact Statement (EIR/EIS) prepared by the County of Santa Barbara, Cachuma Operations and Maintenance Board, and the Department of the Interior, Bureau of Reclamation (February 2004) was prepared for the raising of the lake and is hereby incorporated by reference (www.ccrb-comb.org/ccrb_studies_eireis.htm). Because that EIR/EIS did not specifically examine the details of the boat launch facilities replacement, this environmental document has been prepared for that purpose.

PROJECT BACKGROUND

Cachuma Lake is located 25 miles northwest of Santa Barbara, on the Santa Ynez River, and measures approximately 8 miles long by up to 1 mile wide and covers over 3,250 acres when full. The U.S. Department of Interior, Bureau of Reclamation, dedicated the 200,000+ acre-foot reservoir in the early 1950s with the completion of the Bradbury Dam. A vicinity map is provided as Figure 1 and a map of Cachuma Lake is provided as Figure 2. Cachuma Lake supports a number of recreational activities, including boating, fishing, hiking and bird watching. Lake cruises, nature programs, overnight camping, picnic and overlook areas are also offered at the lake. Cachuma Lake is accessed from Highway 154, which merges with Highway 101 near Goleta.

The administrative responsibility of the Cachuma Lake Recreation area including approximately 375 acres of developed recreation area rests with the County of Santa Barbara Parks Department under the terms of a 50-year agreement with the Bureau of Reclamation. The lake is open to boating year round and hours of operation for boating are typically from sunrise to sunset. There are approximately 22,000 boat launches annually at the park (California Department of Boating and Waterways 1996).

The existing facility consists of three concrete boat launch ramps, which include a high, medium and low-water ramp operational only at specific water levels. The high-level ramp serves the 750- to 744-foot surface water elevation; the medium-level ramp serves the 744- to 730-foot surface water elevation; and the low-level ramp serves the 730- to 715-foot surface water elevation. These ramps range in condition from good at the upper ramp to poor at the lower ramps.

The Cachuma Operation and Maintenance Board and the U.S. Department of the Interior, Bureau of Reclamation recently adopted the Lower Santa Ynez River Fish Management Plan and Cachuma Project. That program proposes various management actions and projects to improve habitat conditions for the endangered southern steelhead and other aquatic species on the Santa Ynez River below Bradbury Dam in northern Santa Barbara County. Under the program, the maximum operational lake level of Cachuma Lake has been raised in recent years from approximately elevation 750' to 753', to accommodate releases of water into the Santa Ynez River to encourage the historic salmon run. The existing boat launch ramp area is shown in Figure 3.

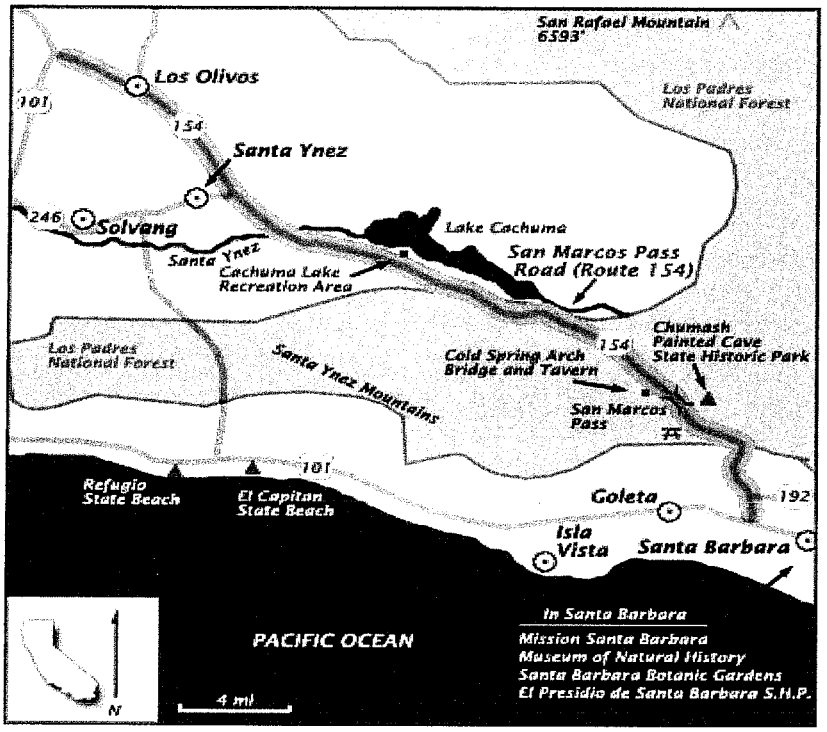


Figure 1 - Cachuma Lake Recreation Area Location

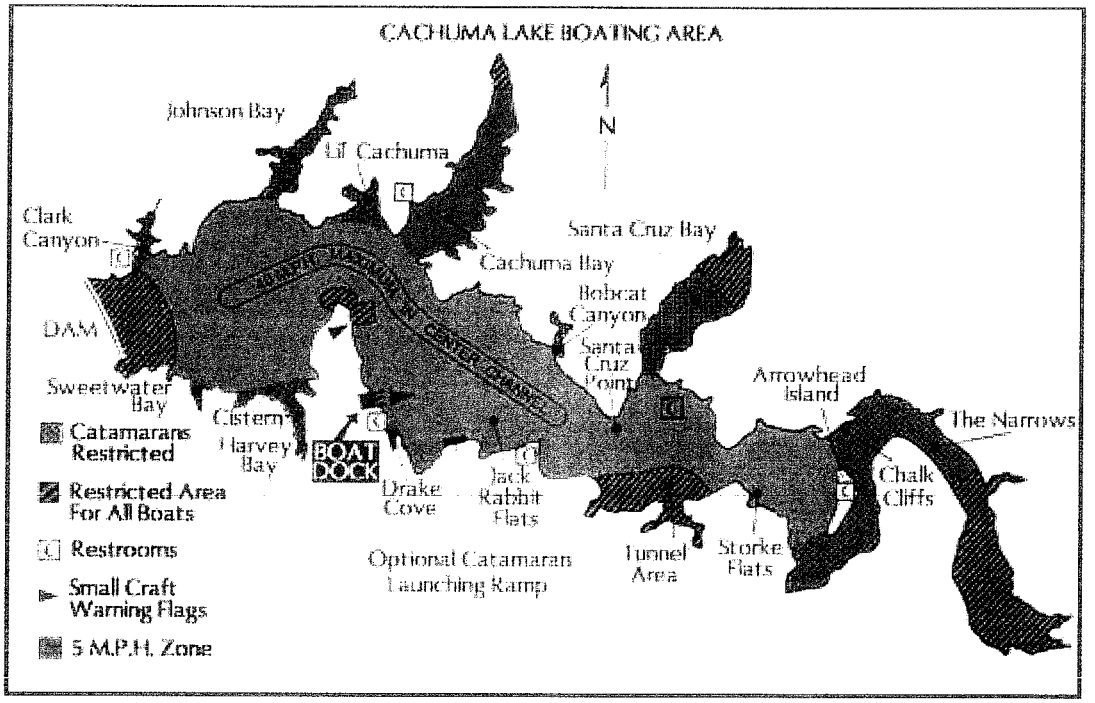


Figure 2 - Boat Launch Facility (Boat Dock) Location

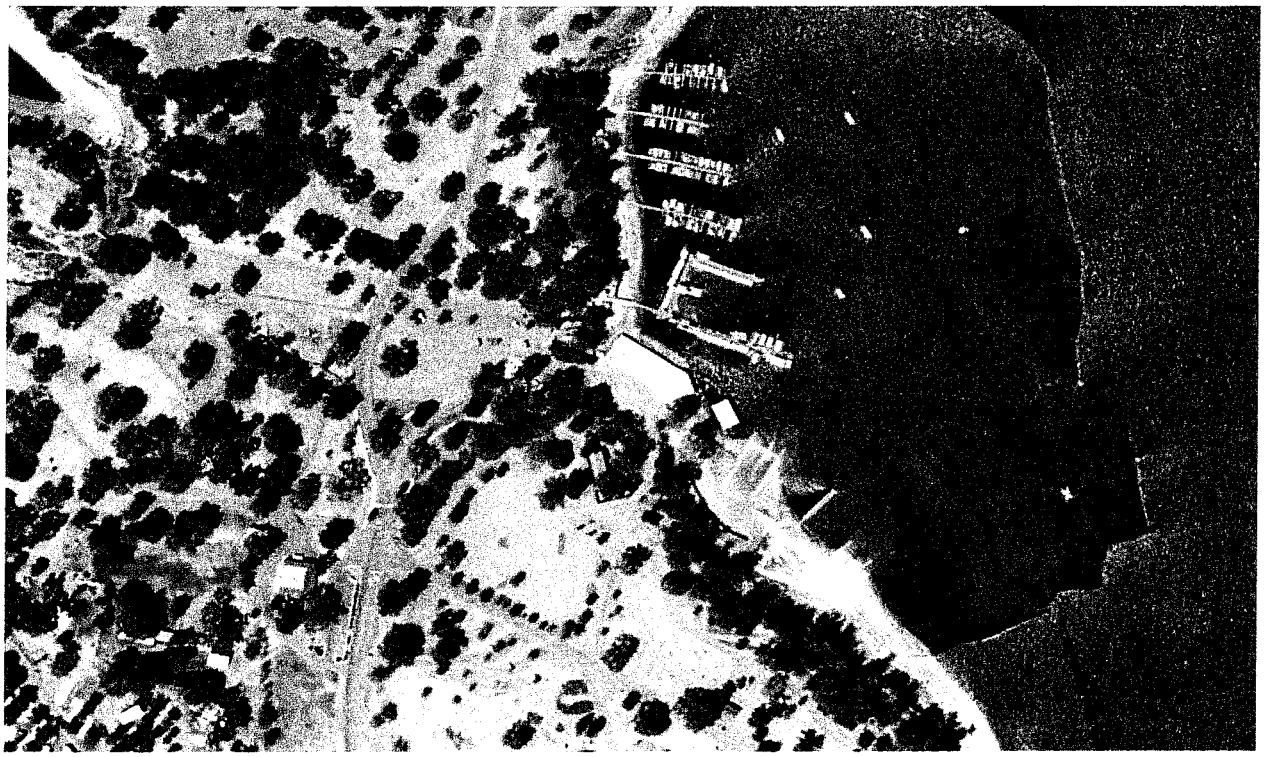


Figure 3 - Existing Boat Launch Ramp Area

PROPOSED ACTION – PLACEMENT OF BOAT LAUNCH RAMP

The proposed action will replace the existing three deteriorating concrete boat launch ramps with a one single 5-lane boat launch ramp. The project will be completed in two phases as shown in Figures 4 and 5.

The Phase I portion of the project (the current project) will be constructed when the lake water elevation is approximately 738 to 742 feet, when the existing upper-level ramp is no longer usable and the existing mid-level ramp comes into service, with the intent of allowing boat launch activities to occur at the mid-level ramp during construction and to allow underwater construction to meet the DBAW approved design elevations. Upon completion of Phase I, this new ramp will be functional from the maximum operational lake level of 753 feet down to water level elevation 730 feet.

If the lake level is higher than elevation 742 feet at the time of construction, due to rainfall or water storage needs, the mid level ramp will be submerged and not available. The length of the new ramp will need to be shortened accordingly.

The Phase I boat launch ramp facility improvements will also include the installation of two boarding float docks. The docks will be approximately 8' wide by 75' long and be designed to be ADA accessible per the aforementioned guidelines. The closest of the three adjacent parking areas serving the launch ramp will be slightly reconfigured and striped to accommodate through-traffic and ADA parking stalls. Water quality and drainage systems will be incorporated into the site improvements to capture and treat runoff from the boat launch and adjacent parking lot area. An access stairway will also be constructed between the adjacent uphill car / trailer parking area and the ramp. The boat launch ramp, boarding floats and parking areas are designed to meet California Department of Boating and Waterways guidelines according to the *Layout, Design and Construction Handbook for Small Craft Boat Launching Facilities.*

Approximately six (6) small oak trees, with trunk diameters less than 4 inches, will be removed in the reconfigured parking area and other trees will be trimmed back in the path of the new stairway from the upper parking area to the ramp. Several small ornamental cypress trees will also need to be removed as part of the widening of the entrance into the launch area.

Future Phase II improvements (not included in the current project) are anticipated to extend the ramp down further to allow for boat launching down to an elevation of 704 feet. Phase II improvements will occur at a later date when the lake water surface is much lower, around elevation 700 feet, during the next prolonged dry period, when the existing mid-level ramp is no longer usable and the existing low-level ramp comes into service, with the intent of allowing boat launch activities to occur at the low-level ramp during construction.

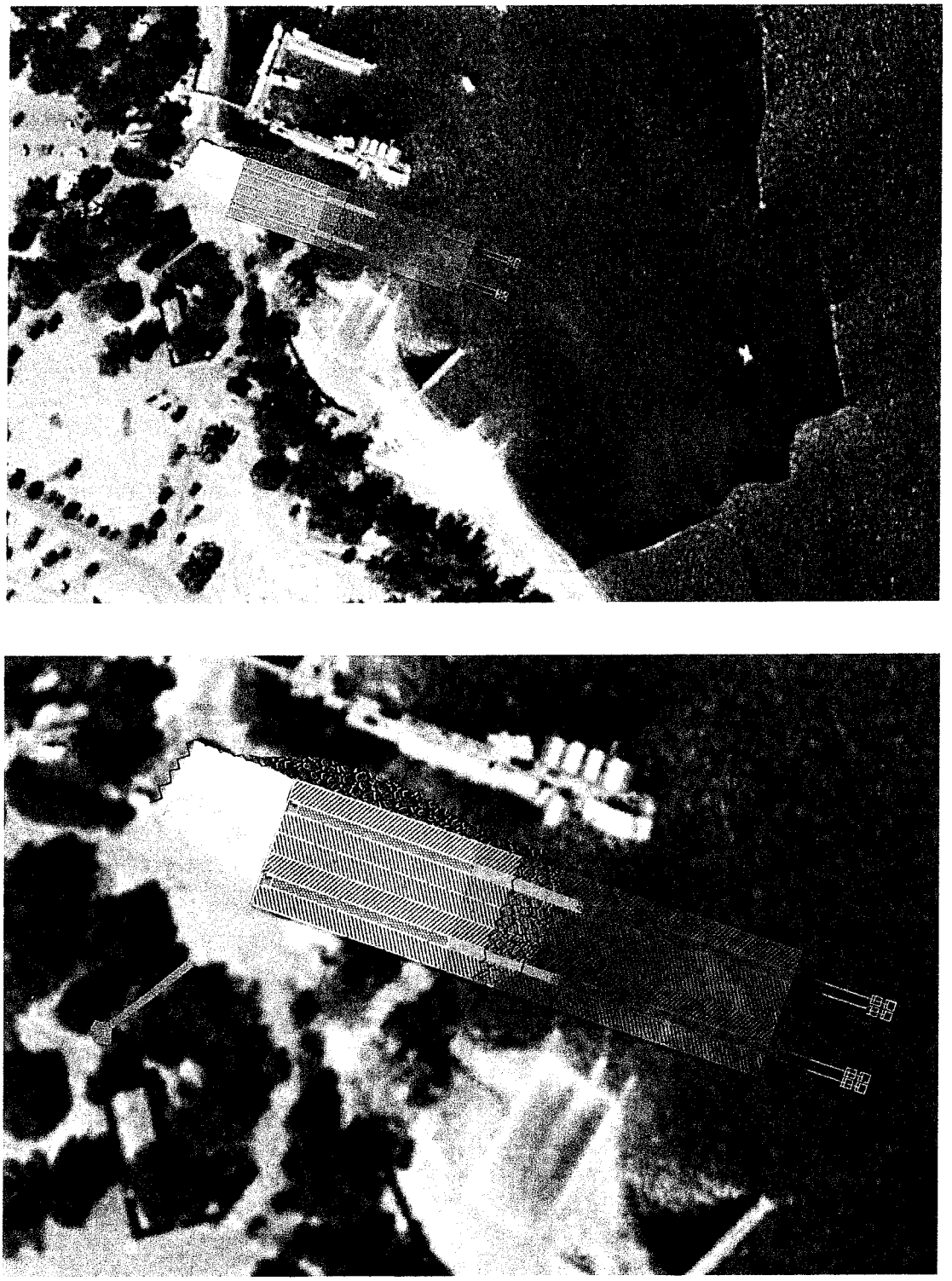
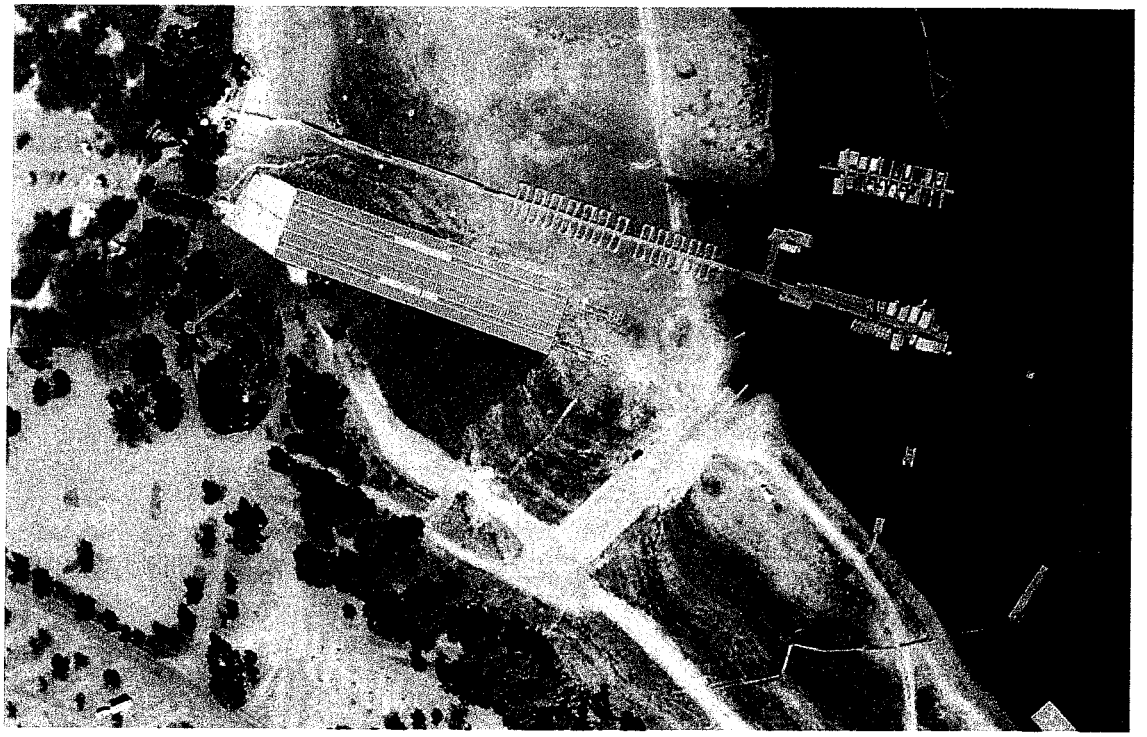


Figure 4 – Boat Launch Ramp Improvements (Phase I)



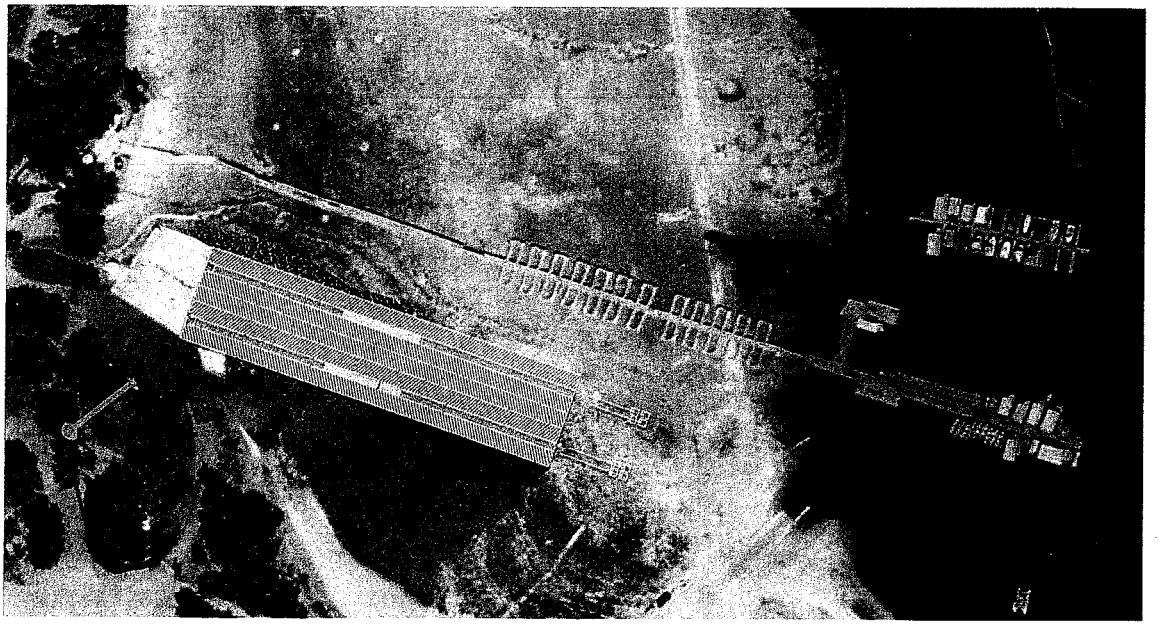


Figure 5 – Future Boat Launch Ramp Improvements (Phase II)
Lake Level Shown at Approximately Elevation 700'

Construction Methods

A portion of the Phase I project (the current project) will need to be constructed underwater (in the "wet"). Fill will consist of approximately 3,400 cubic yards of 500 pound class riprap, 10,000 cubic yards of 3 inch to 6 inch quarry stone, and 5,000 cubic yards of earthen fill. The lower half of the proposed ramp will then be covered with approximately 5,460 to 9,100 square feet of precast concrete panels, depending on lake level, set on grade beams to assist with alignment. The use of precast panels in the underwater portions of ramp construction has been common practice for similar boat launch projects in California. The upper portion of the ramp (including apron) will consist of approximately 13,000 square feet of 8" thick cast-in-place reinforced concrete pavement.

Construction Schedule – Phase I

Mobilization of construction equipment and site clearing is anticipated to take two weeks. Placement of ramp fill will be done in the wet and dry conditions depending on the lake level at time of construction. Construction equipment storage and contractor parking will be allowed in designated staging areas, adjacent to the proposed launch ramps.

Phase I construction of the ramp is anticipated to begin in the fall of 2007 with an anticipated opening of no later than April 2008. The overall improvements are anticipated to be completed within twenty-four (24) weeks from notice to proceed, or approximately one-hundred and twenty (120) working days. No work will occur on State recognized holidays and anticipated working hours are 6:00 am to 10:00 pm.

Construction – Phase II

Phase II improvements will occur at a later date when the lake water surface is much lower, around elevation 700 feet, during the next prolonged dry period, when the existing mid-level ramp is no longer usable and the existing low-level ramp comes into service, with the intent of allowing boat launch activities to occur at the low-level ramp during construction. Phase II improvements are anticipated to extend the ramp down further to allow for boat launching down to an elevation of 704 feet. The methods of construction are assumed to be similar to Phase I presented above.

2.0 PROJECT LOCATION

The Cachuma Lake Recreation Area is located 25 miles northwest of Santa Barbara, and is access via Highway 154, which is accessed via Highway 101 near Goleta. The reservoir is located on the Santa Ynez River, and measures 8 miles long by up to 1 mile wide and covers over 3,250 acres. Cachuma Lake supports a number of recreational activities, including boating, overnight camping, fishing, hiking and bird watching. Lake cruises, nature programs, picnic and overlook areas are also offered at the lake.

The facility is operated and maintained by Santa Barbara County Parks and sees up to 22,000 boat launches annually. The lake is open to boating year round and hours of operation for boating are typically from sunrise to sunset.

Site Information	
Comprehensive Plan Designation	Federal Land
Zoning District, Ordinance	Federal Land, Recreation Use
Site Size	Boat Launch Area – 2.5 acres
Present Use & Development	County Park
Surrounding Uses/Zoning	The boat launch facilities are in and surrounded by the Cachuma Lake Recreation Area
Access	State Highway 154, from Pacific Coast Highway in Santa Barbara County
Public Services	Not Applicable.

3.0 ENVIRONMENTAL SETTING

Surrounding Land Uses

The boat launch ramps are located on the shoreline of Cachuma Lake, the U.S. Bureau of Reclamation's 200,000+ acre-foot reservoir in Santa Barbara County. The reservoir is located 25 miles northwest of Santa Barbara, on the Santa Ynez River. The recreation area encompasses about 9,250 acres, with about 375 acres developed for public recreational use as County Park property. The surface area of Cachuma Lake is about 3,250 acres (at full capacity). Cachuma Lake supports a number of recreational activities, including boating, fishing, hiking and bird watching. Lake cruises, nature programs, overnight camping, picnic and overlook areas are also offered at the lake.

Existing Structures and Use

The existing facility consists of three boat launch ramps; a high, medium and low-water ramp located adjacent to the park's entrance. The boat launch facilities serve approximately 22,000 boat launches annually. Peak attendance is August. Attendance is lighter in the spring and fall months and drops to about 5 percent of annual visitation during the winter months. The lowest attendance was observed during drought years, particularly in 1990-91 when the lake level was at its lowest (661 feet) (California Department of Boating and Waterways 1996).

Visual Setting

The Cachuma Lake Recreation Area is visually characterized as a lake surrounded by rolling hillsides, quiet, scenic and in an all natural setting. It is in a mostly undeveloped valley among wooded mountains. The boat ramp facility can be characterized as an older, degraded ramp facility.

Slope/Topography

The greater Cachuma Lake Recreation Area includes rugged hillsides and oak woodland-covered shores within the Upper Santa Ynez Valley. The area near the boat launch area levels out to a mild slope. The elevation of the top of the existing launch ramp is approximately 760 feet. The Valley has an average elevation of 700 feet.

Fauna

Cachuma Lake is stocked with a variety of warmwater fish and hatchery rainbow trout (Santa Barbara County and Bureau of Reclamation 2003). At least 15 fish species have been identified in the lake including rainbow trout, prickly sculpin, threespine stickleback, largemouth and smallmouth bass, bluegill, redear sunfish, green sunfish, white crappie, black crappie, channel catfish, black bullhead, threadfin shad, goldfish, carp and mosquitofish. Of these species, only rainbow trout, three-spine stickleback, and prickly sculpin are native to southern California. Rainbow trout currently are maintained in Cachuma Lake by stocking. Since 1997, the allotment for Cachuma Lake has been 48,000 rainbow trout.

The open waters of Cachuma Lake as well as the surrounding oak woodland, coastal sage scrub, and chaparral provide habitat for a wide variety of birds and wildlife. During the winter large numbers of ducks visit Cachuma Lake (Schram 1998). In addition to fish, these ducks provide a prey base for bald eagles. Other raptors in the park include osprey, northern harrier, red shouldered hawk, red tailed hawk, peregrine falcon, and golden eagle. The oak woodland by the lake shelters such birds as acorn woodpecker and oak titmouse. The coastal sage scrub and chaparral are frequented by wrentit, California thrasher, California towhee and golden-crowned sparrow.

Five sensitive animal species are known to occur at Cachuma Lake: bald eagle, American peregrine falcon (Santa Barbara County and Bureau of Reclamation 2004), Cooper's hawk, southwestern willow flycatcher (Bureau of Reclamation 2006), and southwestern pond turtle (CDFG 1988). The bald eagle is state listed as endangered and federal listed as threatened. The American peregrine falcon is listed as state endangered. Both these species suffered reproductive declines as a result of DDT, but have since recovered. The federal government has proposed delisting the bald eagle (CDFG 2003). Cooper's hawk is state listed as a California species of special concern. Southwestern willow flycatcher was federally listed as endangered in 1995 and state listed as endangered in 1991. The southwestern pond turtle is a species of special concern (CDFG 2006). In 1988, surveys conducted at Cachuma Lake by CDFG found the southwestern pond turtle common in the reservoir (CDFG 1988).

One pair of bald eagles breed regularly at Cachuma Lake (Santa Barbara County and Bureau of Reclamation 2004), and appear to be year-round residents. The bald eagle nesting areas are not in the vicinity of the project site. In winter, bald eagle numbers at Cachuma Lake are augmented by relatively large numbers of wintering birds. During the past 17 years, counts have ranged from 2 to 18 eagles (Santa Barbara County and Bureau of Reclamation 2004). Bald eagles eat fish and waterfowl.

Peregrine falcons nest on cliff ledges in the Santa Ynez mountains. They are uncommon winter visitors to Cachuma Lake, where they feed on over-wintering and resident birds. (Santa Barbara County and Bureau of Reclamation 2004).

Cooper's Hawks, which nest in riparian areas and coast live oak trees, are uncommon in the Cachuma Lake Recreation Area (Bureau of Reclamation 2006).

The southwestern willow flycatcher has rarely been seen in the Cachuma Lake area. It breeds uncommonly on the Santa Ynez River near Buellton and near the river's confluence with Santa Rosa Creek. Of two sightings in the Cachuma area, one was an obvious migrant and the other was in Santa Cruz Creek in plausible breeding habitat, though in follow-up surveys there were no further sightings (Bureau of Reclamation 2006). This potential breeding habitat is not in the project area, and the project area is not suitable breeding habitat for this species.

The southwestern pond turtle was commonly found in the resevoir in surveys conducted at Cachuma Lake by CDFG in 1988 (CDFG 1988).

Flora

Plant communities that occur around Cachuma Lake include grasslands, coast live oak woodland, chaparral, coastal sage scrub, freshwater marsh and riparian (Santa Barbara County and Bureau of Reclamation 2004). Figure 6 shows the vegetation map of the plant communities around Cachuma Lake. The boat launch area that will be renovated is in a developed recreational area, vegetated by oak trees.

There are eight sensitive species that occur in the Cachuma Lake area alone. They are listed in the Cachuma RMP DRAFT (Table 3.4-3). Four species in particular are aquatic and are locally rare in Santa Barbara County. Three of these include fragrant flatsedge (*Cyperus odoratus*), dwarf spike-rush (Eleocharis pervula), and small pondweed (*Potamogeton pusillus*), all of which have been recorded in isolated years in mudflats at the east end of Cachuma Lake. The fourth species, burhead (*Echinodorus berteroi*), is found in mudflats and around the lake perimeter annually in the warmer months (Bureau of Reclamation 2006). The former three species do not occur in the project area. The latter species does occur in the project area, however, it is abundant throughout the Cachuma Lake shoreline.

Surface Water Bodies

The boat launch facility provides boating access to Cachuma Lake, a 3,250 acre reservoir on the Santa Ynez River. Cachuma Lake follows a typical lacustrine pattern of stratification during the spring and summer, with vertical mixing of the water column in late fall and winter (Santa Barbara County and Bureau of Reclamation 2004). Water temperatures at depths of 30 to 50 feet decrease 5 to 20 degrees Celsius during the spring and summer as the lake stratifies. As surface water temperatures decrease in the fall, vertical mixing occurs and the lake turns over.

Total Dissolved Solids (TDS) in Cachuma Lake have been measured over the past 40 years by various agencies (Santa Barbara County and Bureau of Reclamation 2004). Over this time the TDS in the reservoir has increased from about 525 milligrams/liter (mg/l) to 650 mg/l. The average seasonal variation in TDS during the year is about 80 mg/l. TDS typically is low in the winter due to freshwater inflows and increases in the summer and fall due to evaporation.

Soils

The site lies within the upper Santa Ynez Valley, a broad triangular valley with an average elevation of 700 feet, described as a structural trough (Santa Barbara County Department of Public Works 2004). Streams have cut below the original valley surface, indicating a slight uplift of the Valley over time.

Soils at the site are characterized as soft to medium dense sand derived from weathered sandstone transported by streams from the Santa Ynez mountains to the south (Santa Barbara County Department of Public Works 2004).

Cultural Resources

Archaeology

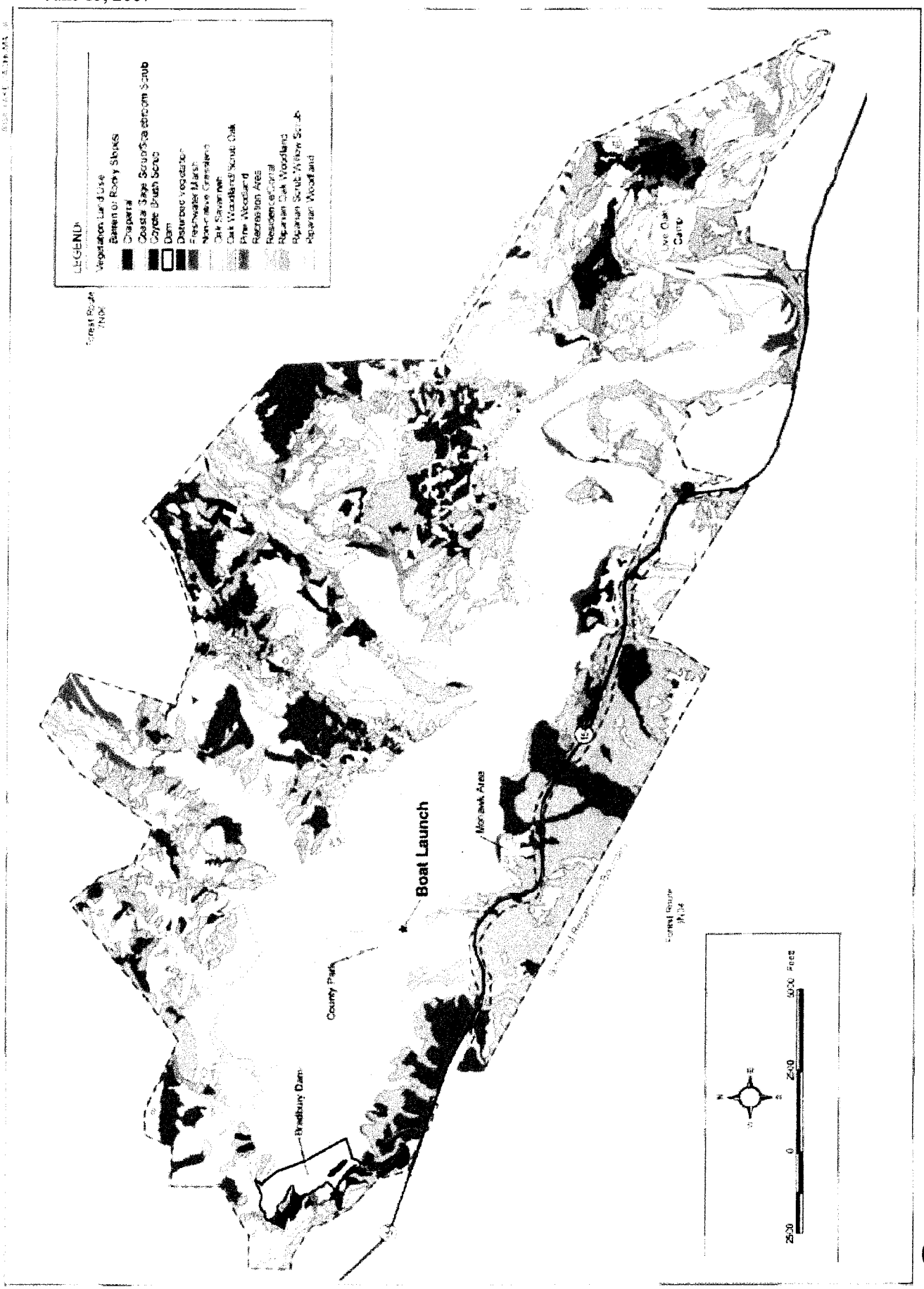
The project area is in territory originally occupied by the Chumash Native American group. The Chumash occupied the coast from Malibu Canyon to San Luis Obispo and inland as far as the western edge of the San Joaquin Valley (Grant 1978a). The northern Channel Islands were also inhabited by Chumash. The Chumash were one of the most socially and economically complex hunting and gathering groups in North America (Arnold 1987:4). The full development of Chumash culture took place during the Late Period (800 to 150 B.P. or approximately A.D. 1150 to 1800). Along the Santa Barbara Channel and on the Channel Islands there were a series of permanent or semi-permanent villages with populations of 200 to 600 or more individuals (Grant 1978b). The principal economic pursuits were marine fishing and trading. Status differentiation had developed to the point where village chiefs inherited their rank and probably controlled trade and redistribution.

The Area of Potential Effects (APE), or project area where impacts could occur, encompass approximately 1 acre for the Boat Launch Ramp Area. Mary Maki of Conejo Archaeological Consultants performed a records search and archaeological field survey of the APE (Maki 2004) to help determine whether significant historic properties would be affected by the project (per Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR 800) or whether historical or cultural resources would be significantly impacted (per the NEPA regulations at 40 CFR 1508.27).

One cultural resources site (CA-SBA-3738) was recorded by Maki (2004) within the Boat Launch Ramp Area. The site was evaluated by Applied Earthworks in late 2004. Because of the small sample size, lack of artifact variability and lack of chronological controls, the site does not have the potential to provide important new archaeological data and is, therefore, not a significant site, and not eligible for the National Register of Historic Places (Applied Earthworks 2005). Therefore, it need not be considered further relative to the proposed project.

Historic Structures

No historic structures more than 50 years old are present within the Area of Potential Effects (APE).



VEGETATION SURROUNDING LAKE CACHUMA
Figure 6

Source:
Santa Barbara County, 2004. Final Program EIR/EIS - Lower Santa Ynez River Fish Management Plan and Cachuma Project Biological Opinion for Southern Steelhead Trout
www.cobcorib.org/crib_studies_areas.htm

Chambers Group

4.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

The following checklist indicates the potential level of impact and is abbreviated as follows:

Known Signif.: Known significant environmental impacts.

Unknown Poten. Signif.: Unknown potentially significant impacts which need further review to determine significance level.

Poten. Signif. and Mitig.: Potentially significant impacts which can be mitigated to less than significant levels.

Not Signif.: Impacts which are not considered significant.

Reviewed Under Previous Document: The analysis contained in a previously adopted/certified environmental document addresses this issue adequately for use in the current case. Discussion should include reference to the previous documents, a citation of the page or pages where the information is found, and identification of mitigation measures incorporated from those previous documents. NOTE: Where applicable, this box should be checked in addition to one indicating significance of the potential environmental impact.

4.1 AESTHETICS/VISUAL RESOURCES

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. and Mitig.	Not Signif.	Reviewed Under Previous Document
a. The obstruction of any scenic vista or view open to the public or the creation of an aesthetically offensive site open to public view?				X	
b. Change to the visual character of an area?				X	
c. Glare or night lighting which may affect adjoining areas?				X	
d. Visually incompatible structures?				X	

Impact Discussion:

The Cachuma Lake Recreation Area is visually characterized as a lake surrounding by rolling hillsides, quiet, scenic and in an all natural setting. It is in a mostly undeveloped valley among wooded mountains. The existing boat ramps can be characterized as older, degraded ramp facilities. The new ramp facility would be located in approximately the same location as the existing ramps. The overall, general character of the area will not change, as they will not result in any obtrusive visual structures. The new ramp and associated parking will not detract from or obstruct the background vistas. No additional lighting will be associated with the new ramp construction, however, security lighting will be provided in the new parking area at the boat launch area. Lighting would be directed in a downward position and hooded to avoid night glare.

The proposed project would not obstruct any view or scenic vista, nor create an aesthetically offensive site to public view. Although the visual character of the area will have a slight change, the effects would be minimally significant. Neither glare nor night lighting would impact the surrounding area, and the proposed boat launch ramps would be visually compatible to the existing setting.

Mitigation and Residual Impact:

No mitigation is necessary.

4.2 AGRICULTURAL RESOURCES

Will the proposal:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. and Mitig.	Not Signif.	Reviewed Under Previous Document
a. Convert prime agricultural land to non-agricultural use, impair agricultural land productivity (whether prime or non-prime) or conflict with agricultural preserve programs?				X	
b. An effect upon any unique or other farmland of State or Local Importance?				X	

Impact Discussion:

There is no prime agricultural land in the vicinity. The Cachuma Lake Recreation Area is recreational use land. The project will neither convert agricultural lands to other uses, nor impair agricultural land productivity.

Mitigation and Residual Impact:

No mitigation is necessary.

4.3 AIR QUALITY

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation including, CO hotspots, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?				X	
b. The creation of objectionable smoke, ash or odors?				X	
c. Extensive dust generation?			X		

The following characterization of the atmospheric environment includes an evaluation of the meteorology and climatology, ambient air quality, and applicable rules, regulations, and standards for the proposed project. In general, the baseline data presented here serve as a reference point against which to assess project-related impacts: a discussion of the meteorology and climatology is important in evaluating pollutant levels so that comparisons with project-related emission increments can be made; and a review of applicable air quality regulations assists in determining if violations of the standards are likely to occur or if mitigation measures and/or emission offsets would be necessary.

Existing Setting

Atmospheric Setting

Meteorological and climatological factors are critical to the assessment of potential air quality impacts, since they collectively account for the transport and dispersion of pollutants, and play a role in the chemistry that leads to formation of secondary pollutants such as ozone and aerosols. Specific parameters evaluated include general climatological features, temperature, precipitation, winds, and inversions. The latter two factors (winds and inversions) exert the greatest influence on regional air quality.

The climate of the South Central Coast is Mediterranean, with approximately half of the year being wet and cool (November to April) and the remainder of the year characterized by dry and warm weather (May to October). The major climatic influences on the study area are the Pacific High, a semi-permanent pressure system which generally lies over the ocean to the west; migratory cyclonic storms, which yield most of the annual rainfall; and the Pacific Ocean, which serves as a source of moisture for the atmosphere. The net effect of the above factors is a mild climate with little severe weather and with rainfall concentrated in the winter months.

Migratory cyclonic storms periodically affect the area, notable during the October-April period. Depending on the relative strength of a storm, the Pacific High may either deflect such storms northward, or weaken and shift them southward. In the latter case, the storms can produce periods of cloudiness, strong winds, and precipitation in the study area. Annual precipitation displays a large degree of variation, ranging from less than 25.4 cm (10 in.) to more than 101.6 cm (40 in.). The long-term average annual total precipitation is about 45.7 cm (18 in.).

Storm conditions are usually followed by periods of clear skies, cool temperatures, and gusty westerly winds as frontal systems move eastward. Such movement is likely to be accompanied by strengthening of high pressure over inland areas far to the northeast (eastern California and Nevada). These conditions can produce the warm, dry, easterly winds, commonly known as Santa Anas, which are often quite strong near coastal canyons and valleys. Such winds can occur at any time of the year, but are most common from late summer through early winter.

While temperatures can vary widely through the whole South Central Coast Air Basin, the range of temperatures along the coastal strip is fairly small due to the influence of the Pacific Ocean. Temperatures below freezing are rare, as are those in excess of 100°F (38°C). In January, daily maximum and minimum temperatures at the Santa Barbara Airport (the nearest long-term measurement station to the project site) average about 64° F (18°C) and 40°F (4°C), respectively. Corresponding July values are 73°F (23°C) and 56° F (13°C) (Chambers Group, 1987). Extreme temperatures observed in the Goleta area range from about 100° F (40°C) to about 25°F (-5° C).

Precipitation in the project area is primarily a winter phenomenon (November to April), with approximately 90 percent of the annual total occurring during this period. Precipitation is mainly in the form of rain along the coast and the lowland areas, and may occur as both rain or snow in the higher mountain area. The summer months are usually quite dry with thundershowers

producing occasional rainfall. Precipitation in the region varies widely from year to year. At the Santa Barbara Airport, annual precipitation is 22.1 cm (8.7 in.) or less about once every 10 years; it can also be more than 71.1 cm (28 in.) 1 year in 10.

The wind regime along the exposed coastline and on the mountain ridges in the area generally conforms closely to that of the basic circulation, since terrain influences are minimal at these locations. In major valleys, the wind direction is highly biased to the general orientation of the particular valley. Wind behavior in the smaller valleys in the area is complex, but is influenced by the prevailing direction, the solar angle, and terrain features.

Wind flow in the south coast region of Santa Barbara County is generally northerly in the early morning and from the south to southwest in the afternoon. Further out in the Santa Barbara Channel, the winds are generally west to northwest. These general flow patterns can result in the transport of early morning project emissions toward the metropolitan Santa Barbara area and Ventura County.

Regulatory Setting

Criteria Air Pollutants

The quality of the ambient air is affected by pollutants emitted into the air from stationary and mobile sources. Stationary sources can be divided into two major subcategories: point sources and area sources. Point sources consist of one or more emission sources at a facility with an identified location and are usually associated with manufacturing and industrial processing plants. Area sources are widely distributed and produce many small emissions.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources are a combination of emissions from automobiles, trucks, and indirect sources. Indirect sources are sources that by themselves may not emit air contaminants; however, they indirectly cause the generation of air pollutants by attracting vehicle trips or consuming energy. Examples of indirect sources include an office complex or commercial center that generates commuter trips and consumes energy resources through the use of electricity for lighting and natural gas for space heating. Indirect sources also include actions proposed by local governments, such as redevelopment districts and private projects involving the development of either large buildings or tracts. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and State law. These regulated air pollutants are known as "criteria air pollutants" and are categorized as primary and secondary pollutants. Primary criteria air pollutants and their precursors are those that are emitted directly from sources. Carbon monoxide (CO); reactive organic gases (ROG); nitrogen oxides (NOx); sulfur dioxide (SO_2); and most fine particulate matter (PM_{10}, $PM_{2.5}$), including lead (Pb) and fugitive dust; are primary air pollutants. Secondary criteria air pollutants are those pollutants formed by chemical and photochemical reactions in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are the principal secondary pollutants.

Ambient Air Quality Standards

Air quality impacts of a project, combined with existing background air quality levels, must be compared to the applicable ambient air quality standards (AAQS) to gauge their significance. 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 "sensitive receptors" 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. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Those standards currently in effect in California are listed in Table 4.3-1.

Existing Air Quality

Santa Barbara County is considered in attainment of the state and federal CO standards and federal eight-hour ozone standard, but does not meet the state one-hour ozone standard or the PM_{10} particulate standard. The SBCAPCD does not yet have enough data to determine the attainment status for either the state or federal standard for $PM_{2.5}$ particulate matter. The state recently adopted a new eight-hour ozone standard that became effective in May 2006. Although the state has not yet issued attainment designations, SBCAPCD data indicate that the area will be considered in nonattainment of this standard. The USEPA officially revoked the federal one-hour ozone standard on June 15 of 2005.

Cachuma Lake is located in the south-central portion of Santa Barbara County and is under Santa Barbara County Air Pollution Control District (SBCAPCD) jurisdiction. The project is located most proximate to the Paradise Road Monitoring Station and ambient pollutant levels are best inferred from data monitored at this station. Unfortunately, the station does not monitor CO or PM_{10} and these levels are inferred for measurements obtained by the SBCAPCD at its Los Flores monitoring station located to the west of the project. Monitoring for $PM_{2.5}$ was recently included at the East Canon Perdido monitoring station in the downtown Santa Barbara area. The most current five years of data monitored at these monitoring stations are included in Table 4.3-2. Note that none of the standards have been violated in the last two years. Still, the data indicate that the area is sensitive to ozone as these standards were violated within the last three years of data.

Methodology

Projected air emissions are calculated using the heavy equipment emission factors as included in the CARB OFFROAD2007 computer model. On-road emissions were calculated using the EMFAC2007 emissions factors for vehicle traffic. The calculated emissions of the project are compared to thresholds of significance for individual projects using the SBCAPCD *Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District (Revised November 16,2000* (Guidelines) and the *Scope and Content of Air Quality Sections in Environmental Documents* (Updated July, 2006). Additionally, the methodology complies with the *County of Santa Barbara Environmental Thresholds and Guidelines Manual* (July 2003).

Table 4.3-1
Ambient Air Quality Standards For Criteria Pollutants

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Major Pollutant Sources
Ozone (O_3)	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070	0.08 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Average	*	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.25 ppm	*	
Sulfur Dioxide (SO_2)	Annual Average	*	0.03 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	*	
	24 hours	0.04 ppm	0.14 ppm	
Suspended Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 $\mu g/m^3$	50 $\mu g/m^3$	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
	24 hours	50 $\mu g/m^3$ (PM_{10})	150 $\mu g/m^3$ (PM_{10})	
Suspended Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 $\mu g/m^3$	15 $\mu g/m^3$	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
	24 hours	*	65 $\mu g/m^3$	
Lead (Pb)	Monthly	1.5 $\mu g/m^3$	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	*	1.5 $\mu g/m^3$	
Sulfates (SO_4)	24 hours	25 $\mu g/m^3$	*	Industrial processes.

Ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter
*** = standard is not used for this pollutant/duration by this entity.**

Table 4.3-2
Ambient Air Quality Monitoring Summary,
Paradise Road/Los Flores Canyon/East Canon Perdido
Monitoring Stations[1]

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels During Such Violations				
	2001	2002	2003	2004	2005
Ozone					
State 1-Hour ≥ 0.09 ppm	4	3	6	0	0
Federal 1-Hour > 0.12 ppm	0	0	0	0	0
Federal 8-Hour > 0.08 ppm	2	5	5	0	0
Max. 1-Hour Conc. (ppm)	0.117	0.113	0.107	0.089	0.089
Max. 8-Hour Conc. (ppm)	0.106	0.090	0.091	0.081	0.082
Carbon Monoxide					
State 1-Hour > 20 ppm	0	0	0	0	0
State 8-Hour > 9.0 ppm	0	0	0	0	0
Federal 8-Hour ≥ 9.5 ppm	0	0	0	0	0
Max. 8-Hour Conc. (ppm)	0.55	0.57	0.94	0.53	0.51
Nitrogen Dioxide					
State 1-Hour ≥ 0.25 ppm	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.018	0.021	0.032	0.026	0.016
Inhalable Particulates (PM_{10})[2]					
State 24-Hour > 50 $\mu g/m^3$	0	0	0	0	0
Federal 24-Hour > 150 $\mu g/m^3$	0	0	0	0	0
Max. 24-Hour Conc. ($\mu g/m^3$)	34.0	32.6	38.5	30.8	30.7
Inhalable Particulates ($PM_{2.5}$)[2]					
Federal 24-Hour > 65 $\mu g/m^3$	ND[3]	ND	0	0	0
Max. 24-Hour Conc. ($\mu g/m^3$)	ND	ND	24.0	27.5	28.3

[1] Ozone and nitrogen dioxide are as monitored at the Paradise Road monitoring station. Carbon monoxide and PM_{10} are as monitored at the Los Flores Canyon monitoring station. $PM_{2.5}$ is as measured at the East Canon Perdido monitoring station.
[2] Percent of samples exceeding standard.
[3] ND – No Data.
ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter
Source: California Air Resources Board Internet Web Site.

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation including, CO hotspots, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?				X	
b. The creation of objectionable smoke, ash or odors?				X	
c. Extensive dust generation?			X		

Impact Discussion:

Cachuma Lake is located in the south-central portion of Santa Barbara County and is under Santa Barbara County Air Pollution Control District (SBCAPCD) jurisdiction. Projected air emissions are calculated using the heavy equipment emission factors as included in the CARB OFFROAD2007 computer model. On-road emissions were calculated using the EMFAC2007 emissions factors for vehicle traffic. To determine the significance of the impact, the calculated emissions of the project are compared to thresholds of significance for individual projects using the SBCAPCD *Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District (Revised November 16,2000* (Guidelines).

The SBCAPCD Guidelines note that "A proposed project will not have a significant air quality effect on the environment, if" Operation of the project will:

- Emit from all project sources, mobile and stationary, less than the daily trigger for offsets set in the APCD New Source Review Rule, for any pollutant (i.e., 240 pounds per day for ROG or NOx, and 80 pounds per day for PM_{10});
- Emit less than 25 pounds per day of oxides of nitrogen (NOx) or reactive organic compounds (ROG) from motor vehicle trips only;
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);
- Not exceed the APCD health risk public notification thresholds adopted by the APCD Board; and/or
- Be consistent with the adopted federal and state Air Quality Plans."

Note that the criteria are specific to the *operation* of a project and the Guidelines do not present threshold levels for project construction. However, the APCD uses 25 tons per year for ROG or NOx. The District does not present threshold values for other pollutant species, however, construction dust must be controlled under Rule 302 (Visible Emissions) and Rule 303 (Nuisance). Adherence to these Rules typically requires the use of dust abatement procedures (such as site watering) during construction. Note that the included equipment listing includes two water trucks for this purpose.

Short-term Air Quality Impacts – Construction Equipment and Dust Generation

Construction activities would result in the generation of air pollutants. These emissions would primarily be (1) exhaust emissions from powered construction equipment, (2) dust generated from earthmoving, excavation and other construction activities, (3) motor vehicle emissions associated with vehicle trips and (4) hydrocarbon emissions from the application of asphalt. Construction equipment is included below:

- 1 – 500 hp / 100 ton crane (8 weeks) for riprap/panel/dock placement
- 2 – 100 hp backhoe loader (8 weeks) for demolition and earthwork
- 1 – 240 hp / 3.5 cy bulldozer (4 weeks) for earthwork
- 1 – 200 hp water trucks (4 weeks) for earthwork and compaction
- 1 – 300 hp concrete truck (10 weeks) for ramp and stairway construction
- 1 – 300 hp pumper truck (10 weeks) for ramp and stairway construction
- 1 – 80 hp vibratory roller (3 weeks) for roadways and parking lot
- 1 – 150 hp paving machine (3 weeks) for roadways and parking lot
- Misc. trucks

Construction of replacement of existing boat launch facilities is estimated at approximately 22 weeks, although all of the equipment would not be used continually during this period. The analysis assumes that this construction occurs in the year 2007. A second phase of construction would occur at a later date when the lake is low. Phase I and II construction would not be expected to occur within the same year and their emissions would not be additive in the determination of the annual emissions inventory.

Earthmoving and construction activities will consume diesel fuel and thus produce combustion by-products. Emissions for equipment were based on a model year 2007 run of the CARB OFFROAD2007 computer model. Equipment type, horsepower, and scheduling are provided by the Moffett and Nichol Engineers. The analysis also considers worker trips and assumes two workers for each piece of equipment allocated (20 workers total). Additionally, the analysis assumes an average of five heavy trucks a day for the removal of debris and delivery of equipment and materials. Vehicle emissions are based on a model year 2007 run of the EMFAC2007 computer model (BURDEN2007 module). Trip lengths are based on the values provided in the URBEMIS2002 computer model for the urban Santa Barbara area (i.e., 12.5 miles each way). A similar value is applied to the trucks.

PM_{10} associated with the generation of dust is based on the default value presented in the URBEMIS2002 model (i.e., 10 pounds per acre per day). The entire area of disturbance is approximately 2.5 acres. As a worst-case scenario, it is assumed that the entirety of this area is disturbed on a daily basis for the entire 22 weeks of construction. The contractor will be required to follow the procedures set forth by the SBCAPCD for dust control (Rules 302 and 303) and a control efficiency of 50 percent is assumed. Additionally, much of the material that is excavated from the ramp area would already be moist due to it having been under the water level (even though work will be performed in the dry, material is assumed to still be moist from the adjacent water).

Finally, the analysis considers the ROG emissions given off from the degassing of the asphalt paving. The URBEMIS2002 model estimates that each acre paved generates 2.62 pounds or ROG. As a worst-case scenario, it is assumed that the entirety of the 2.5 acres is to be paved over a three-week period. Based on these assumptions, yearly construction emissions are included in Table 4.3-3. Note that all emissions are well below the recommended threshold values and the impact is less than significant.

Table 4.3-3
Projected Construction Emissions (Tons/Year)

Source	CO	NOx	ROG[1]	SOx	PM_{10}[2]
Equipment & Worker Vehicles	1.37	1.90	0.26	0.00	0.78
SBCAPCD Threshold	NA[3]	25	25	NA	NA
Exceeds Threshold?	No	No	No	No	No

[1] Includes ROG for both exhaust and asphalt.
[2] Includes PM_{10} for both exhaust and dust.
[3] NA, Not Applicable. The SBCAPCD has no threshold for this pollutant.

Long-Term Air Quality Impacts

The project is to provide a new boat launch ramp facility to replace existing facilities and that will function over the operational depth range of the lake. The project is not expected to result in any substantial increased use of the lake. Mobile-source emissions, including boats and automobiles, would remain similar to existing conditions and no new long-term emissions, or impacts, are associated with the facilities.

The concessionaire runs motor boats on the lake as well as the general public. The new, wider ramps will provide more launch space and the ramps will have better access routes and more efficient parking areas, all resulting in less idling time and a small reduction in emissions that would offset any increase in emissions from an increase in the number of boaters. Any such increase in boaters to the lake is expected to be small, as the project is intended to increase the overall efficiency of the facility to better serve existing lake boaters.

Consistency With Air Quality Planning

Air emissions in Santa Barbara County are regulated by the SBCAPCD. Individual projects are assessed as described below. The SBCAPCD is required pursuant to the Clean Air Act to reduce emissions of criteria pollutants for which the County is in non-attainment. Strategies to achieve these emissions reductions are developed in the *Final 2001 Clean Air Plan* as adopted by the Air Pollution Control District Board of Directors on November 15, 2001. The Clean Air Plan outlines regional programs and control measures to reduce future emissions based on population projections. This Plan was adopted by both the SBCAPCD and approved by both the CARB and USEPA. The Plan is still in effect for federal standards and shows how the county will maintain attainment with the federal one-hour ozone standard through 2015. The *Final 2001 Clean Air Plan* also includes a three-year plan revision required by the state to show how the county will work toward meeting the state one-hour ozone standard.

The *2004 Clean Air Plan* represents the three-year update for California Clean Air Act. This Plan was adopted by the SBCAPCD Board in December of 2004, and has been submitted to the California Air Resources Board. This Plan shows how the county will make progress towards meeting the state one-hour ozone standard, although the 2001 Plan remains in effect for federal requirements.

The SBCAPCD *Draft 2007 Clean Air Plan* is currently being prepared to address both federal and state requirements and the public draft is now available for comment and review. The SBCAPCD expects to adopt this current plan in mid-2007. The federal requirements pertain to provisions of the Federal Clean Air Act that apply to the current designation as an attainment area for the federal 8-hour ozone standard. Areas that are designated as attainment for the federal 8-hour ozone standard and attainment for the previous federal 1-hour ozone standard with an approved maintenance plan must submit an 8-hour maintenance plan.
The Draft 2007 Plan provides a three-year update to the SBCAPCD *2004 Clean Air Plan.* Previous plans developed to comply with the state ozone standard include the1991 Air Quality Attainment Plan, the 1994 Clean Air Plan, the 1998 Clean Air Plan, and the 2001 Clean Air Plan.

The *Clean Air Plans* are based on inventory data derived from many sources including the APCD's Annual Emission Inventory Questionnaire and Annual Reports programs, the Santa

Barbara County Association of Governments, the California Air Resources Board, surveys from Santa Barbara businesses, and other U.S., state, and county government agencies.

Individual projects and long-term programs within the region are required to be consistent with the Clean Air Plan. The project would not involve growth inducing impacts or cause an exceedance of established population or growth projections and is consistent with the existing and surrounding land uses. Furthermore, the project would not produce either short- or long-term significant quantities of criteria pollutants or violate ambient air quality standards. Therefore, the project is consistent with the Clean Air Plan. No mitigation measures are necessary.

Creation of Smoke, Ash or Odors

Project construction will involve the use of heavy equipment creating exhaust pollutants from on-site earth movement and from equipment bringing concrete and other building materials to the site. No smoke or ash would occur. With regards to nuisance odors, any air quality impacts will be confined to the immediate vicinity of the equipment itself. By the time such emissions reach any sensitive receptor sites away from the project site, they will be diluted to well below any level of air quality concern. An occasional "whiff" of diesel exhaust from trucks accessing the site from public roadways may result. Such brief exhaust odors are an adverse, but not significant, air quality impact.

Mitigation and Residual Impact:

Construction dust must be controlled under Rule 302 (Visible Emissions), Rule 303 (Nuisance), and Rule 305 (Particulate Matter Concentration – Southern Zone. Adherence to these Rules typically requires the use of dust abatement procedures (such as site watering) during construction. Note that the included equipment listing includes two water trucks for this purpose. No residual impacts will result.

4.4 BIOLOGICAL RESOURCES

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
Flora					
a. A loss or disturbance to a unique, rare or threatened plant community?				X	
b. A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants?				X	
c. A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)?				X	
d. An impact on non-native vegetation whether naturalized or horticultural, if of habitat value?				X	
e. The loss of healthy native specimen trees?				X	
f. Introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat?				X	
Fauna					
g. A reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals?				X	

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
h. A reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates)?				X	
i. A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)?				X	
j. Introduction of barriers to movement of any resident or migratory fish or wildlife species?				X	
k. Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife?				X	

Impact Discussion:

Flora

The Boat Launch Ramp is located in a developed area of the park. Improvements to the launch ramp area would result in a small amount of disturbance to vegetation. A few cypress trees would be removed for the wider launch facilities. A few small oak trees with trunk diameters of less than 4 inches would be removed to accommodate access from the upper parking area to the ramp by way of a concrete stairway. The path of the stairway is designed to minimize impacts to native vegetation. The stairway would follow an existing route through brush and trees. The oak trees that would be removed are not specimen trees, which are defined as having a trunk of 6 inches or greater. The Cypress trees that may require removal to accommodate the new launch area are not subject to restrictions or requirements as they are non-native trees. Impacts to trees are not significant.

No unique, rare, or threatened plant communities would be significantly affected. No sensitive plant species occur in the vicinity of the project area of Cachuma Lake. Therefore, this project would not affect any unique, rare or threatened species of plants. Construction of the new launch ramps would not result in a reduction in the extent, diversity, or quality of native vegetation.

Fauna

All impacts to the fauna from the construction of the boat launch facilities would be not significant. The boat launch facilities are located in developed areas characterized by human disturbance. Neither bald eagles nor peregrine falcons nest near the launch ramp facilities, nor do southwestern pond turtles forage in the area. Therefore, these two listed bird species and this species of special concern, the southwestern pond turtle, would not be affected by the construction of the boat launches. Construction of the launch ramp would not change the character of these recreational portions of the park and thus would not result in a reduction in the diversity of animals, or a deterioration of the project areas as wildlife habitat.

A portion of the new boat launch would be constructed underwater. Fill will consist of approximately 5,400 cubic yards of 5000 pound class riprap, 10,000 cubic yards of 3 inch to 6 inch quarry stone, and 5,000 cubic yards of earthen fill. Precast reinforced concrete panels would be set on the lower half of the ramp slope to act as the ramp surface. The upper portions of the ramp would consist of cast-in-place reinforced concrete pavement.

Installation of the lower portions of the ramp would temporarily disturb aquatic life in the vicinity of the structure. Fishes and waterbirds probably would avoid the area during construction but would return when construction was finished. Lake soft bottom habitat and associated benthic organisms in the footprint of the new launch ramp would be lost. Loss of less than 1.0 acre of lake bottom would not be a significant impact.

The launch facility would not hinder fish or wildlife movement and would not introduce any new factors that could hinder the normal activities of wildlife.

Mitigation and Residual Impact:

No impacts occur and no mitigation is required.

4.5 CULTURAL RESOURCES

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
Archaeological Resources					
a. Disruption, alteration, destruction, or adverse effect on a recorded prehistoric or historic archaeological site (note site number below)?				X	
b. Disruption or removal of human remains?				X	
c. Increased potential for trespassing, vandalizing, or sabotaging archaeological resources?				X	
d. Ground disturbances in an area with potential cultural resource sensitivity based on the location of known historic or prehistoric sites?				X	
Ethnic Resources					
e. Disruption of or adverse effects upon a prehistoric or historic archaeological site or property of historic or cultural significance to a community or ethnic group?				X	
f. Increased potential for trespassing, vandalizing, or sabotaging ethnic, sacred, or ceremonial places?				X	
g. The potential to conflict with or restrict existing religious, sacred, or educational use of the area?				X	

Impact Discussion:

The Area of Potential Effects (APE), or project area where impacts could occur, encompass approximately 1 acre for the Boat Launch Ramp Area. Mary Maki of Conejo Archaeological Consultants performed a records search and archaeological field survey of the APE (Maki 2004) to help determine whether significant historic properties would be affected by the project (per Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR 800) or whether historical or cultural resources would be significantly impacted (per the NEPA regulations at 40 CFR 1508.27).

A survey of the APE revealed the existence of one cultural resources site (CA-SBA-3738) within to the Boat Launch ramp area. Subsequent evaluation of the site (Applied Earthworks 2005) resulted in a determination of not eligible for listing on the National Register of Historic Places or the California Register of Historical Resources. Therefore, development of the project will not cause a significant effect on historic or cultural resources.

Human remains are not likely in the project area since they are usually found in habitation sites (villages or residential bases). In the unlikely event that human remains are encountered, impacts to human remains would be significant without mitigation.

The Native American Heritage Commission conducted a search of its Sacred Lands File and reported no resources of concern to Native Americans in the project area. A letter was sent to the Santa Ynez Chumash Elders Council asking if they had concerns about resources in the project area. They did not reply. This indicates the proposed project will not impact any sites of ethnic sacred, ceremonial, or religious significance to Native Americans.

Mitigation and Residual Impact:

Because the archaeological site CA-SBA 3738 has been evaluated as not eligible for listing on the NRHP and the CRHR, no further cultural resources study, including monitoring, is recommended for this site (Applied Earthworks 2005: 5.7) and within the APE as a whole. If, however, the lake level is lowered, a qualified archaeologist must survey any newly exposed ground surface within the APE. In addition, an archaeologist must be granted the power to temporarily halt or redirect construction activity in the event that archaeological resources are identified during construction. If archaeological resources are identified, a test program may need to be completed and the results used to evaluate whether the site is eligible for the NRHP under Criterion D. If determined eligible by the Bureau of Reclamation and SHPO and if the Bureau of Reclamation and SHPO determine the effects on such site will be adverse, mitigation measures consisting of avoidance or data recovery will be implemented.

If human remains are encountered, the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) and state law will be followed.

If eligible archaeological resources or human remains are present, implementation of this measure will reduce impacts to less than significant and affects are not adverse.

4.6 ENERGY

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
a. Substantial increase in demand, especially during peak periods, upon existing sources of energy?				X	
b. Requirement for the development or extension of new sources of energy?				X	

Impact Discussion:

The project will not require the development of new sources of energy. No impacts will occur.

Mitigation and Residual Impact:

No mitigation is required.

4.7 FIRE PROTECTION

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
a. Introduction of development into an existing high fire hazard area?				X	
b. Project-caused high fire hazard?			X		
c. Introduction of development into an area without adequate water pressure, fire hydrants or adequate access for fire fighting?				X	
d. Introduction of development that will hamper fire prevention techniques such as controlled burns or backfiring in high fire hazard areas?				X	
e. Development of structures beyond safe Fire Dept. response time?				X	

Impact Discussion:

Other than a caretaker residence above the Main Launch Ramp area, there are no residences or structures proximate to the proposed work areas. No development projects are proposed, thus, no impacts would occur to any development (a., c., d., and e. above). However, the project construction is in an area where wildfires can spread rapidly (b., above).

In a typical weather year, the potential for fires increases as the hot summer months turn to fall. The proposed project is scheduled to begin construction in later fall to winter in the high fire season when the area is dry. The Cachuma Lake shoreline and nearshore is characterized by dry chapparal, sage scrub, grasses and some mature trees.

Construction activities could temporarily increase the likelihood for fires to occur especially near dry vegetation. Fires could be generated from construction equipment or carelessness. Construction crews would be using a rage of gasoline and diesel-powered equipment which can produce sparks and pose a fire threat.

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

Mitigation and Residual Impact:

The mitigation measures below shall be applied to the project.

FP-1: Fire management mitigation measures shall be noted within the construction specifications prior to issuance of the building permit for the project. The construction monitor shall ensure that fire management measures are adhered to.

FP-2: The contractor shall clear dry brush areas prior to construction. The construction monitor shall ensure that dry brush areas are cleared.

FP-3: The contractor shall be required to have firefighting tools (such as shovels, extinguishers, water tanks, and pumps) on hand during all construction activities. The construction monitor shall ensure that necessary firefighting tools are present during all construction activities.

FP-4: The contractor shall have spark arrestors on engines and flues. The construction monitor shall ensure that spark arrestors are installed on all engines and flues.

FP-5: If a fire starts, the contractor's employees shall immediately begin fire control efforts and immediately report all fires to the County of Santa Barbara and the Bureau of Reclamation. The construction monitor shall ensure that in the event of a fire, the contractor's employees immediately begin fire control efforts and immediately report the fire to the County of Santa Barbara and the Bureau of Reclamation.

FP-6: The contractor's staff shall not be allowed to smoke onsite, other than in specifically allowed areas. The construction monitor shall ensure that no smoking occurs onsite except in specifically allowed areas.

With incorporation of the mitigation measures, impacts will be reduced to less than significant.

4.8 GEOLOGIC PROCESSES

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
a. Exposure to or production of unstable earth conditions such as landslides, earthquakes, liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible soils), or similar hazards?				X	
b. Disruption, displacement, compaction or overcovering of the soil by cuts, fills or extensive grading?				X	
c. Permanent changes in topography?				X	
d. The destruction, covering or modification of any unique geologic, paleontologic or physical features?				X	
e. Any increase in wind or water erosion of soils, either on or off the site?				X	
f. Changes in deposition or erosion of beach sands or dunes, or changes in siltation, deposition or erosion which may modify the channel of a river, or stream, or the bed of the ocean, or any bay, inlet or lake?				X	
g. The placement of septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent?				X	
h. Extraction of mineral or ore?				X	
i. Excessive grading on slopes of over 20%?				X	
j. Sand or gravel removal or loss of topsoil?			X		
k. Vibrations, from short-term construction or long-term operation, which may affect adjoining areas?				X	
l. Excessive spoils, tailings or over-burden?				X	

Impact Discussion:

A Geotechnical Report for the project has been approved by the County of Santa Barbara Public Works Department (Project No. 720647, May 2004). Soils at the site are characterized as soft to medium dense sand derive from weathered sandstone transported by streams from the mountains to the south.

Major earthquake faults occur within the surrounding mountains and throughout the valley. The Santa Ynez (west), Los Alamos-West Baseline, Mission Ridge, and North Channel Slope faults are the nearest faults to the site and have accelerations greater than 0.291g. All are located within 10 miles of the site. The Santa Ynez fault was used as the site's design fault.

A drilling field program was conducted where the improvements are planned to evaluate the occurrence and depth of groundwater and the geologic materials at the site, conduct standard penetration testing (SPT) and collect undisturbed and bulk samples for geotechnical analysis, and to collect information on the lithology of the soils at the site. The Geotechnical Report contains specifics of the program, including construction requirements.

The results of the slope stability analyses show that the existing slope is stable and that soil consistency, while loose, can be compacted to 90 to 95 percent of maximum density using standard construction equipment. No exposure of the public to unstable earth conditions will occur. The project will not result in impacts caused by extensive grading, permanent topography changes, destruction of unique physical features; increase in soil erosion, or changes in siltation or modification to the lake bed. The project will not require placement of a septic system in unsuitable soils conditions, nor result in mineral or ore extraction.

The County found that the Older Alluvium deposits within the investigated soils have a relatively low liquefaction potential due to high blow counts above 30 per foot for SPT values combined with the presence of some clay from grade to project depth.

The project will require slope work in the permanent excavations and placement of fill embankments in the project that will be under and adjacent to the ramp. The County report requires that permanent cut slopes be no steeper than 1.5 Horizontal:1 Vertical, and permanent compacted fill slopes be no steeper than 2 Horizontal:1 Vertical. Finished slopes above the future lake level shall be planted and/or protected to reduce surface erosion. The report also gives recommendations for fill compaction and fill benching. The County Public Works and Moffatt and Nichol Engineers will review the finished grading earth plans and specifications prior to construction, and the County will provide field observation and testing during construction to verify that site preparation, excavation, and finished grading conforms to the intent of the geotechnical recommendations, project plans and specifications.

Mitigation and Residual Impact:

With adherence to the County recommendations, no impacts would occur, thus no mitigation would be required.

4.9 HAZARDOUS MATERIALS/RISK OF UPSET

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
a. In the known history of this property, have there been any past uses, storage or discharge of hazardous materials (e.g., fuel or oil stored in underground tanks, pesticides, solvents or other chemicals)?				X	
b. The use, storage or distribution of hazardous or toxic materials?				X	
c. A risk of an explosion or the release of hazardous substances (e.g., oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions?				X	
d. Possible interference with an emergency response plan or an emergency evacuation plan?				X	
e. The creation of a potential public health hazard?				X	
f. Public safety hazards (e.g., due to development near chemical or industrial activity, producing oil wells, toxic disposal sites, etc.)?				X	
g. Exposure to hazards from oil or gas pipelines or oil well facilities?				X	
h. The contamination of a public water supply?				X	

Impact Discussion:

The project area is County recreational land. No hazards or hazardous materials exist, and there is no historic use of hazardous materials in the immediate project area. The project will not result in the use of hazardous substances that could pose public safety risks, nor interfere with emergency response plans. No transport of hazardous materials is associated with the project. Emissions from construction equipment are addressed under Air Quality. No oil or gas pipelines, oil wells or toxic disposal sites, or contamination of a public water supply would be involved with the construction of the boat launch ramps.

The project would only use diesel fuels for construction equipment. No other hazardous materials would be associated with construction. Diesel fuel may spill into the waterway. The project construction will be subject to use of standard Best Management Practices (BMPs) as discussed under Hydrology/Water Quality.

Potential public safety issues may occur with construction equipment operating in the vicinity of recreational users. This issue is discussed under Recreation.

Mitigation and Residual Impact:

No mitigation is required.

4.10 HISTORIC RESOURCES

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
a. Adverse physical or aesthetic impacts on a structure or property at least 50 years old and/or of historic or cultural significance to the community, state or nation?				X	
b. Beneficial impacts to an historic resource by providing rehabilitation, protection in a conservation/open easement, etc.?				X	

Impact Discussion:

No historic structures or properties more than 50 years old are present within the Area of Potential Effects (APE), or project area where impacts would occur. Therefore, no historic structures or properties will be impacted by the proposed project.

Mitigation and Residual Impact:

No mitigation is required.

4.11 LAND USE

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. And Mitig.	Not Signif.	Reviewed Under Previous Document
a. Structures and/or land use incompatible with existing land use?				X	
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X	
c. The induction of substantial growth or concentration of population?				X	
d. The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				X	
e. Loss of existing affordable dwellings through demolition, conversion or removal?				X	
f. Displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X	
g. Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X	
h. The loss of a substantial amount of open space?				X	
i. An economic or social effect that would result in a physical change? (i.e. Closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.)				X	
j. Conflicts with adopted airport safety zones?				X	

Impact Discussion:

The Cachuma Lake Recreation Area is federal land designated for recreational uses, and is managed by the County of Santa Barbara under a long-term contract. The County is authorized to make and enforce rules at the recreation area to prevent pollution, protect visitor health and safety, law and order, plants and wildlife, and to protect and conserve the scenic, scientific, aesthetic, historic and archaeological resources of the park.

Since this is a replacement of the boat launch ramp facility, the project will not result in impacts since the new ramp facility is compatible with the existing land use. The project will not result in changes in land use, or the loss or displacement of housing or people, nor will it add new housing. The project will not result in a loss of open space since it only serves to replace the launch ramp. Also, the project will not require any extension of sewer trunk lines or access roads that would serve new development. No economic or social effects will occur. The project is not located in an adopted airport safety zone.

Mitigation and Residual Impact:

No mitigation is required.

4.12 NOISE

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. and Mitig.	Not Signif.	Reviewed Under Previous Document
a. Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)?				X	
b. Short-term exposure of people to noise levels exceeding County thresholds?				X	
c. Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)?				X	

Impact Discussion:

The project is located within the Cachuma Lake Recreation Area in a developed portion of the area. Ambient noise levels are characterized by existing roadway traffic and watercraft, but for the most part, would range from about 40 to 50 dBA CNEL.

Being located in the unincorporated portion of Santa Barbara County the project is subject to the County Municipal Code and noise ordinance. The local noise ordinance for a construction-related project is enforced by the County of Santa Barbara (Division of Environmental Review and Compliance) through the Coastal Zoning Ordinance. The County's *Environmental Thresholds and Guidelines Manual* (July 2003) set the allowable exterior noise at 65 dBA at any sensitive receptor. Sensitive uses include:

Residential, including single- and multi-family dwellings, mobile home parks, dormitories, and similar uses,

- Transient lodging, including hotels, motels, and similar uses,
- Hospitals, nursing homes, convalescent hospitals, and other facilities for long-term medical care,
- Public or private educational facilities, libraries, churches, and places of public assembly.

The Municipal Code sets allowable hours for construction. County Section 14-22. "Grading hours; limitation" notes no grading work (except for emergency operations), which requires a grading permit under the provisions of this chapter shall take place between the hours of 7:00 P.M. and 7:00 A.M., unless the director finds that such operation is not likely to cause significant public nuisance and authorizes such night operations in writing.

Section 26-62 of the County Municipal Code, "Parks' quiet" states that..."(a) Quiet hours must be observed between 10:00 P.M. and 7:00 A.M. the following morning in all parks in which overnight stay is authorized. (b) No person shall operate or use any device which produces *noise*, annoyance or other disturbing sound including, but not limited to, a radio, television, musical instrument, generator, motor or engine between the hours of 10:00 P.M. and 7:00 A.M.

(c) No person shall create or maintain any loud or offensive noise or noise that creates any unreasonable disturbance between the hours of 10:00 P.M. and 7:00 A.M. (Ord. No. 3708, § 1)."

Section 26-92 of the County Municipal Code, "Lake--Boat standards; exhaust muffled" notes that the exhaust of every internal combustion engine used on any motor boat upon Cachuma Lake shall be effectively muffled at all times to prevent any excessive or unusual noise.

Thresholds for significance are as included in the County of Santa Barbara *Environmental Threshold Guidelines Manual*. The Manual includes the thresholds of significance for assisting in the determination of significant noise impacts. The thresholds are intended to be used with flexibility, as each project must be viewed in its specific circumstances. Excerpts from the Manual relative to noise are included below:

- A proposed development that would generate noise levels in excess of 65 dBA CNEL and could affect sensitive receptors would generally be presumed to have a significant impact.

- A project will generally have a significant effect on the environment if it will increase substantially the ambient noise levels for noise-sensitive receptors adjoining areas. Per the above, this may generally be presumed when ambient noise levels affecting sensitive receptors are increased to 65 dBA CNEL or more. However, a significant effect may also occur when ambient noise levels affecting sensitive receptors increase substantially but remain less than 65 dBA CNEL, as determined on a case-by-case level.

- Noise from grading and construction activity proposed within 1,600 feet of sensitive receptors, including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact. Camping facilities can be considered a sensitive receptor for the purposes of this analysis per Section 26-62 of the County Municipal Code that addresses Parks' quiet periods. (The County bases the 1,600-foot distance on a construction noise value of 95 dBA at a 50 foot distance from the source and the attenuation of this noise to 65 dBA.) To mitigate this impact, the County requires that construction within 1,600 feet of sensitive receptors (camping sites) shall be limited to weekdays between the hours of 8:00 a.m. and 5:00 p.m. only. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dBA may require additional mitigation.

Long-Term Exposure of People to Noise / Project-Generated Increases in Ambient Noise Levels

The project consists of the replacement of the boat launch facility at an existing recreational area. While a small increase in users is possible, a substantial increase in vehicle trips or lake use is not expected. A small increase in vehicle traffic would not raise ambient noise levels to a level of significance. No significant impacts would result from project development and no mitigation measures are necessary.

Short-Term (Construction) Exposure of People to Noise

Noise levels associated with construction activities would be higher than the ambient noise levels in the project area today, but would subside once construction of the proposed project is completed.

All projects constructed in the County of Santa Barbara are subject to standard conditions set forth in the Municipal Code. Compliance with these provisions is mandatory and as such, does not constitute mitigation under CEQA. Project construction is subject to County Section 14-22. "Grading hours; limitation" which limits construction to between the hours of 7:00 a.m. and 7:00 p.m. unless the director finds that such operation is not likely to cause significant public nuisance and authorizes such night operations in writing.

Two types of noise impacts could occur during the construction phase. First, the transport of workers, materials and equipment to the construction site would incrementally increase noise levels along site access roadways. The greatest potential for this impact would be near the project site where workers and trucks converge. An audible increase of 3 dBA would require that the level of construction traffic double the current traffic volumes. This volume of additional traffic would not be expected and construction traffic would add less than 1 dBA CNEL to the existing noise and the impact is less than significant.

The second type of impact is related to noise generated by on-site construction operations and the local area would be subject to elevated noise levels due to the operation of this equipment. Construction activities are carried out in discrete steps, each of which has its own mix of equipment, and consequently its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow noise ranges to be categorized by work phase. Table 4.12-1 lists typical construction equipment noise levels recommended for noise impact assessment at a distance of 50 feet.

Table 4.12-1
Noise Levels Generated By Typical Construction Equipment

Type of Equipment	Range of Sound Levels Measured (dBA at 50 feet)	Suggested Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers, 12,000 to 18,000 ft-lb/blow	81 to 96	93
Rock Drills	83 to 99	96
Jack Hammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	68 to 80	77
Dozers	85 to 90	88
Tractor	77 to 82	80
Front-End Loaders	86 to 90	88
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86

Graders	79 to 89	86
Air Compressors	76 to 86	86
Trucks	81 to 87	86

The grading and site preparation phase typically tends to create the highest noise levels, because the noisiest construction equipment is found in the earthmoving equipment category. This category includes excavating machinery (bulldozers, draglines, front loaders, etc.) and earthmoving and compacting equipment (compactors, scrapers, graders, etc.). Typical operating cycles may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Noise levels at 50 feet from earthmoving equipment range from 73 to 96 dBA while Leq noise levels range up to about 89 dBA. This 89 dBA Leq value is also presented for evaluation of construction noise by the USEPA (USEPA, 1971). The later construction of structures is somewhat reduced from these values and the physical presence of the structure may break up line-of-sight noise propagation.

Assuming construction results in an 89 dBA Leq, the 65 dBA level would fall at a distance of approximately 790 feet. However, the County of Santa Barbara suggests using a 95 dBA value. As the County notes, "noise from grading and construction activity proposed within 1,600 feet of sensitive receptors, including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact". (The County bases this distance on a construction noise value of 95 dBA at a 50 foot distance from the source and the attenuation of this noise to 65 dBA.) There are 110 campsites and 56 RV sites that are located within 1,600 feet of the construction work. These sites would be subject to County restrictions on hours of construction from 8:00 a.m to 5:00 p.m. and the impact is less than significant.

Mitigation and Residual Impact:

No mitigation is required.

4.13 PUBLIC FACILITIES

Will the proposal result in:	**Known Signif.**	**Unknown Poten. Signif.**	**Poten. Signif. and Mitig.**	**Not Signif.**	**Reviewed Under Previous Document**
a. A need for new or altered police protection and/or health care services?				X	
b. Student generation exceeding school capacity?				X	
c. Significant amounts of solid waste or breach any national, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity)?				X	
d. A need for new or altered sewer system facilities (sewer lines, lift-stations, etc.)?				X	
e. The construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X	

Impact Discussion:

The new ramps will not result in the need for increased public facilities. No impacts will result.

Mitigation and Residual Impact:

No mitigation is required.

4.14 RECREATION

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. and Mitig.	Not Signif.	Reviewed Under Previous Document
a. Conflict with established recreational uses of the area?				X	
b. Conflict with biking, equestrian and hiking trails?				X	
c. Substantial impact on the quality or quantity of existing recreational opportunities (e.g., overuse of an area with constraints on numbers of people, vehicles, animals, etc. which might safely use the area)?				X	
d. Potential safety issues on recreational users during construction?			X		

Impact Discussion:

The recreation area encompasses about 9,250 acres, with about 375 acres developed for public recreational use as County Park property. The surface area of Cachuma Lake is about 3,250 acres (at full capacity) with boating and fishing as primary water recreation activities. Public facilities at the County Park include campsites, general store, marina, private docks, bait and tackle shop, horse campsites, a rustic amphitheater, Ranger Station, family fun center, RV-camping, nature center, swimming pools, and snack shop (County of Santa Barbara and Bureau of Reclamation 2004). No body contact sport is allowed due to restrictions by the California Department of Health Services (County of Santa Barbara and Bureau of Reclamation 2004).

The boat launch facilities serve approximately 22,000 boat launches annually. Peak attendance is August. Attendance is lighter in the spring and fall months and drops to about 5 percent of annual visitation during the winter months. The lowest attendance was observed during drought years, particularly in 1990-91 when the lake level was at its lowest (661 feet) (California Department of Boating and Waterways 1996).

The new ramp will serve to replace the older existing ramps and provide a ramp that will allow the facility to remain functional for this higher maximum operational lake level planned by the Bureau of Reclamation. Historically the lake is at its lowest water level during the proposed contruction period. The proposed project will be consistent with the existing uses, will not result in conflicts or impacts to biking, equestrian or trail uses, nor will the project result in increased use of the area.

During construction, the mid-level ramp that will remain in place, may be closed to public use due to water levels and proximity to construction. Also, construction is anticipated to occur in the fall when public use is lowest, thus, minimizing potential impacts to loss of use and construction/recreational user conflicts. Many times, construction equipment left unsecured become areas where park patrons and children explore such equipment, not limited to climbing on equipment, walking through unsafe construction areas, etc. Construction staging will be near the ramp facility, and measures should be incorporated into construction specifications to assure public safety.

The park will remain open during ramp construction. Thus, park visitors may be in the area of construction activity and public safety concerns are of issue. Measures should be incorporated into construction specifications to assure public safety.

Mitigation and Residual Impact

REC-1: Recreation mitigation measures shall be included as part of construction specifications prior to issuance of the building permit for the project.

REC-2: The construction staging area shall be separated from the public by temporary fencing and warning signs. The construction monitor shall ensure that the staging area is properly fenced and marked.**REC-3:** All construction equipment shall be secured within that fenced area after park hours and on weekends. The construction monitor shall ensure that all construction equipment is within the fenced staging area after park hours and on weekends.

REC- 4: To the extent feasible, each construction area shall be cordoned off by tape or some type of temporary barrier if fencing is not feasible. Signs shall be placed warning of possible dangers at all construction locations. Signs shall explicitly warn of dangers in both English and Spanish. The construction monitor shall ensure that construction areas are properly separated from the public and marked with warning signs in English and Spanish.

With incorporation of these measures, impacts will be reduced to the extent possible, and would be less than significant.

4.15 TRANSPORTATION/CIRCULATION

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. and Mitig.	Not Signif.	Reviewed Under Previous Document
a. Generation of substantial additional vehicular movement (daily, peak-hour, etc.) in relation to existing traffic load and capacity of the street system?				X	
b. A need for private or public road maintenance, or need for new road(s)?				X	
c. Effects on existing parking facilities, or demand for new parking?				X	
d. Substantial impact upon existing transit systems (e.g. bus service) or alteration of present patterns of circulation or movement of people and/or goods?				X	
e. Alteration to waterborne, rail or air traffic?				X	
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians (including short-term construction and long-term operational)?			X		
g. Inadequate sight distance?				X	
ingress/egress?				X	
general road capacity?				X	
emergency access?				X	
h. Impacts to Congestion Management Plan system?				X	

Impact Discussion:

The replacement of the ramps will allow the new ramp facility to remain functional for the higher maximum operational lake level planned by the Bureau of Reclamation. Since this is a replacement project, no substantial increase in public use is anticipated. The boat capacity of the lake is a limiting factor in overall usage. Given that the new ramp facility will allow year round use at completion of Phase I and Phase II, a small increase in use may occur. However, there will be no significant increases in traffic load, no need for increased roads or road maintenance, no demand for new parking, or increased demand for public transit. The project will not result in any alteration to waterborne, rail or air traffic, or result in reconfiguration of roadways that would result in safety concerns. The project will not impact any Congestion Management Plan.

The issues of concern to traffic are due to construction. During the course of the 22-week construction period, there will be approximately 5 trucks per day removing demolition materials from the site and delivering riprap and other materials. In the Boat Launch Area, the large cobblestones removed from the existing gabion wall will be stockpiled onsite for later Park use for wall construction, and portions of the medium- and low-water level ramps will remain inplace to minimize construction costs and offsite haulage. Trucks will bring in construction materials and concrete, and manufactured docks. Trucks will be accessing the park during the time of the year when public use is the lowest (see discussion under Recreation above). Still, heavy equipment will be accessing the park, and activity will be concentrated in the Boat Launch facility area. There is a potential for recreational users (vehicles and pedestrians) and construction equipment to be in the same area at the same time, thus there are potential safety impacts to the general public.

State Highway 154, from Pacific Coast Highway in Santa Barbara County serves as access to the recreation area. Construction traffic will access the area via these roadways. Since the area will have low use in the winter, traffic will be less and potential roadway impacts will be less than significant.

Mitigation and Residual Impact:

TC-1: Traffic/circulation mitigation measures shall be included as part of construction specifications prior to issuance of the building permit for the project.

TC-2: The construction contractor shall employ traffic safety measures. These shall include use of flagmen and signage to warn of construction traffic and areas of construction activity, or to reroute park users. The construction monitor shall ensure that proper traffic safety warnings are implemented.

TC-2: Barriers (fencing, barricades, tape) shall be used in areas to keep the public away from areas where construction activity is occurring. The construction monitor shall ensure that appropriate barriers are installed to keep the vehicles of park users away from construction areas.

With these mitigation measures, impacts would be reduced to less than significant.

4.16 WATER RESOURCES/FLOODING

Will the proposal result in:	Known Signif.	Unknown Poten. Signif.	Poten. Signif. and Mitig.	Not Signif.	Reviewed Under Previous Document
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?				X	
b. Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff?				X	
c. Change in the amount of surface water in any water body?				X	
d. Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?			X		
e. Alterations to the course or flow of flood water or need for private or public flood control projects?				X	
f. Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis?				X	
g. Alteration of the direction or rate of flow of groundwater?				X	
h. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference?				X	
i. Overdraft or overcommitment of any groundwater basin? Or, a significant increase in the existing overdraft or overcommitment of any groundwater basin?				X	
j. The substantial degradation of groundwater quality including saltwater intrusion?				X	
k. Substantial reduction in the amount of water otherwise available for public water supplies?				X	
l. Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?			X		

Impact Discussion:

The lower portions of the Boat Launch Ramp would be constructed underwater. Placement of the earth and rock fill would disturb sediments in the immediate vicinity of the launch ramp. Resuspension of sediments would increase turbidity and result in a localized degradation of water quality. However, sediment resuspension would only occur during periods when underwater structures were being installed. Although sediment resuspension would be localized in time and space, impacts to water quality potentially could be significant. Standard construction Best Management Practices (BMPs) would be implemented during construction to avoid introducing sediment or pollutants to the lake.

Filtered catch basins would be added to the newly paved areas of the Boat Launch ramp to capture and filter storm water runoff. These catch basins would ensure that the paved areas of the Boat Launch do not increase runoff rates or result in the introduction of oily substances or other pollutants to the lake. With these measures the proposed project will not have any adverse impact on water quality in Cachuma Lake.

Construction of the launch ramp facility would not change currents, water movements, percolation rates, drainage patterns, the amount of surface water in the lake, or flooding characteristics. Construction of the boat launch facility would have no long-term impact on groundwater or public water supplies.

Mitigation and Residual Impact:

WQ-1: Water quality mitigation measures shall be included as part of construction specifications prior to issuance of the building permit for the project. In addition the construction contractor ashall submit a Storm Water Polution Prevention Plan (SWPPP) prior to issuance of the building permit.

WQ_2: BMPs specified in the SWPPP shall be implemented to avoid introducing sediment or pollutants into the lake. The construction monitor shall ensure that all applicable BMP's specified in the SWPP are implemented.

WQ-3: Silt curtains shall be used to minimize turbidity in the adjacent areas during construction activities. The construction monitor shall ensure that silt curtains are installed during any in-water construction activities.

WQ-4: Construction equipment also shall be checked regularly for potential leaks. The construction monitor shall ensure that all construction equipment is checked regularly for potential leaks.

WQ-5: All debris and trash shall be disposed in suitable trash containers on land at the end of each construction day. The construction monitor shall ensure proper disposal of debris and trash at the end of each construction day.

WQ-6: Discharge of any hazardous materials into the lake shall be prohibited. Excess hazardous materials shall disposed of by the contractor in a proper and legal manner. The construction monitor shall ensure proper disposal of all hazardous materials.

. No residual impacts would occur with implementation of the BMPs.

5.0 INFORMATION SOURCES

5.1 County Departments Consulted

County of Santa Barbara, Public Works Department. Geotechnical Report, Project No. 720647, Prepared by William C. Tracy, Engineering Geologist, May 2004.

5.2 Comprehensive Plan

____	Seismic Safety/Safety Element	____	Conservation Element
____	Open Space Element	X	Noise Element
____	Coastal Plan and Maps	____	Circulation Element
____	ERME	____	

5.3 Other Sources

____	Field work	____	Ag Preserve maps
____	Calculations	____	Flood Control maps
X	Project plans	X	Other technical references (reports, survey, etc.)
____	Traffic studies	____	Planning files, maps, reports
____	Records	____	Zoning maps
____	Grading plans	X	Soils maps/reports
____	Elevation, architectural renderings	____	Plant maps
X	Published geological map/reports	X	Archaeological maps and reports
X	Topographical maps	X	Other

See References below.

References:

Applied EarthWorks, Inc.
2004 Archaeological fieldwork at CA-SBA-2108 and CA-SBA-3738 in October 2004.

Applied Earthworks, Inc
2005 Extended Phase 1 and Phase 2 Archaeological Investigations in Support of Cachuma Lake Boat Launch Ramp Facilities Improvements, Santa Barbara County, California.

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

California Air Resources Board
2002 EMFAC2002 Computer Model, Version 2.2, September 23, 2002.

California Air Resources Board
2002 URBEMIS2002 Computer Model, Version 7.4.2.

California Department of Boating and Waterways
1996 Feasibility Report for Boat Launching Facility Improvements at Cachuma Lake. Santa Barbara County Park Department. Prepared May 1996.

California Department of Fish and Game 2003 Special Animals
2003 California Natural Diversity Database Search. Chambers Group.
2006 California Natural Diversity Database Search. Santa Barbara County Park Department.

California Department of Fish and Game and California Department of Water Resources
1988 Enlargement of Lake Cachuma and Bradbury Dam Safety Modifications. Draft Environmental Impact Report/Statement, Appendix 1, Cachuma Lake Enlargement Fish and Wildlife Resources Report. November.

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

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

Maki, Mary
2004 Archaeological Survey Report Of Approximately Six Acres For The Cachuma Lake Boat Launch Ramp Facilities Improvements Project, Santa Barbara County,

California. Prepared by Conejo Archaeological Consultants, Thousand Oaks. Prepared for Santa Barbara County Parks, Santa Barbara.

Santa Barbara County Air Pollution Control District
2000 Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District. Revised November 16, 2000.

Santa Barbara County Air Pollution Control District
2001 Final 2001 Clean Air Plan. November 15, 2001.

Santa Barbara County Air Pollution Control District
2003 Rules and Regulations. June 2003.

Santa Barbara County, Cachuma Operations and Maintenance Board, and the Department of the Interior, Bureau of Reclamation
2004 Final Program and Project Specific Environmental Impact Report/Environmental Impact Statement (EIR/EIS) Lower Santa Ynez River Fish Management Plan and Cachuma Project Biological Opinion for Southern Steelhead Trout. Prepared (February 2004) (www.ccrb-comb.org/ccrb_studies_eireis.htm).

Santa Barbara County, Public Works Department
2004 Geotechnical Report, Project No. 720647, Prepared by William C. Tracy, Engineering Geologist, May 2004.

Santa Barbara County
1993 County of Santa Barbara Environmental Thresholds and Guidelines Manual. 1993.

Santa Barbara County
2004 Santa Barbara County Code. January 2004.

Schram, B.
1998 *A Birder's Guide to Southern California.* American Birding Association.

South Coast Air Quality Management District
1993 CEQA Air Quality Handbook. April 1993.

U.S. Department of Housing and Urban Development
1984 A Guide to HUD Environmental Criteria and Standards Contained in 24 CFR Part 51, August 1984.

U.S. Department of the Interior, Bureau of Reclamation
2006 Cachuma Lake Resource Management Plan and Environmental Impact Statement. Administrative Draft. August.

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

Personal Contacts:

Vijaya Jammalamadaka, Air Quality Specialist II, July 2004

Robert Sherwood, Project Engineer, Moffatt & Nichol Engineers 2006

Pam Robert, Santa Barbara County Planning Department, 2006

6.0 PROJECT SPECIFIC *(short- and long-term)* AND CUMULATIVE IMPACT SUMMARY

The proposed relocation of the Cachuma Lake Facilities due to surcharging was analyzed as a cumulative project on a programmatic level in the EIS/EIR for the Cachuma Operation and Maintenance Board and the Bureau of Reclamation's Lower Santa Ynez River Fish Management Plan and Cachuma Project. The proposed launch ramp, as well as drainage structures, and access will be at an elevation that will allow the facility to remain functional for this higher maximum operational lake level as per the Bureau of Reclamation project plans. As a replacement project, the project is neither intended nor expected to result in an increase in patrons, only to accommodate and enhance existing use. The current elevation of the top of spillway for the Bradbury Dam is 760.6'. The maximum operational lake level is anticipated to be raised from approximately elevation 750' to 753', to accommodate releases of water into the Santa Ynez River to encourage the historic salmon run.

The project is consistent with the goals and objectives of the Cachuma Operation and Maintenance Board and the Bureau of Reclamation's Lower Santa Ynez River Fish Management Plan and Cachuma Project. That program proposed various management actions and projects to improve habitat conditions for the endangered southern steelhead and other aquatic species on the Santa Ynez River below Bradbury Dam in northern Santa Barbara County. The boat launch replacement project need derives from the greater program action. Under a Memorandum of Understanding the County has until approximately February 2009, if which time, if runoff is available, the lake will be surcharged the 3-feet. Other cumulative project actions to the proposed project relate to raising the lake level and the relocation and maintenance of other park facilities (picnic area, trails, boat shop) affected by the surcharge. All projects are minor actions and involve only short-term impacts that can be mitigated to less than significant. These include temporary increases in construction traffic with possible detours or road closures inside the park, related closure or limited public access to facilities, noise that would be limited to County authorized construction hours, and construction equipment dust and emissions. In some areas, removal of oak trees may occur, however, such trees will likely be affected by the surcharge, and the potential for cultural resources exists. These temporary and biological and cultural resources impacts would be mitigated to less than significant. The boat launch replacement project's contributions to short-term and long-term cumulative impacts would not be considerable.

7.0 MANDATORY FINDINGS OF SIGNIFICANCE

	Known Signif.	Unknown Poten. Signif.	Poten. Signif. and Mitig.	Not Signif.	Reviewed Under Previous Document
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X		
2. Does the project have the potential to achieve short-term to the disadvantage of long-term environmental goals?				X	
3. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects.)				X	
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X		
5. Is there disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR ?				X	

1. Construction of the boat launch ramp will have no significant adverse impact on fish or wildlife species, or rare or endangered plants or animals. No cultural resources were identified, however grading has a minor potential to uncover artifacts. Such sites would require evaluation to determine whether impacts would be significant with implementation of measures for avoidance or data recovery, if necessary, to reduce impacts to less than significant.

2. The short- term goals only are that of construction completion. Long-term, the project is consistent with the greater program for raising of the lake level as addressed in the EIR/EIS prepared for the Lower Santa Ynez Fish Management Plan (Bureau of Reclamation 2004).

3. Cumulative project actions to the proposed project relate to raising the lake level. The boat launch replacement project need derives from the greater program action. Under a Memorandum of Understanding the County has until approximately February 2009, if which time, if runoff is available, the lake will be surcharged the 3-feet. This project does not add significant impacts to the cumulative environment.

4. The project may have direct temporary adverse, but not significant impacts on the public's ability to access boat launches (recreation issue). Portions of other ramps will remain open during construction. Other temporary impacts that are mitigated include public safety, assuring that recreational users and construction activities do not result in safety issues.

5. This replacement boat launch project is consistent with the greater program for raising of the lake level as addressed in the EIR/EIS prepared for the Lower Santa Ynez Fish Management Plan (Bureau of Reclamation 2004). There are no significant impacts that would cause the proposed launch ramp replacements to need to be considered in the context of an EIR. All impacts can be mitigated to less than significant.

9.0 INITIAL REVIEW OF PROJECT CONSISTENCY WITH APPLICABLE SUBDIVISION, ZONING AND COMPREHENSIVE PLAN REQUIREMENTS

The project involves only replacement of existing boat launch ramps. No changes in use are involved. The project would remain consistent with all current requirements.

10.0 RECOMMENDATION BY P&D STAFF

On the basis of the Initial Study, the staff of Planning and Development:

_____ Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.

__X__ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures would successfully mitigate the potentially significant impacts. Staff recommends the preparation of a Mitigated ND (MND). The MND finding is based on the assumption that mitigation measures will be acceptable to the applicant; if not acceptable a revised Initial Study finding for the preparation of an EIR may result.

_____ Finds that the proposed project MAY have a significant effect on the environment, and recommends that an EIR be prepared.

____ Finds that from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.

Potentially significant unavoidable adverse impact areas:

_____ With Public Hearing _____ Without Public Hearing

PREVIOUS DOCUMENT:

PROJECT EVALUATOR:_____ **DATE:**

11.0 DETERMINATION BY ENVIRONMENTAL HEARING OFFICER

__✓__ I agree with staff conclusions. Preparation of the appropriate document may proceed.
____ I DO NOT agree with staff conclusions. The following actions will be taken:
____ I require consultation and further information prior to making my determination.

SIGNATURE:_____ **INITIAL STUDY DATE:** _____

SIGNATURE:_____ **NEGATIVE DECLARATION DATE:**_____

SIGNATURE:_____ **REVISION DATE:** _____

SIGNATURE: _____ **FINAL NEGATIVE DECLARATION DATE:** 6/21/07

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APPENDIX A
CONSTRUCTION EMISSIONS FOR LAKE CACHUMA BOAT LAUNCH RAMPS

The included spreadsheet is used to determine average daily emissions associated with project construction. Heavy equipment emission factors are as based on data generated in the CARB OFFROAD2007 computer model (December 2006).
The number of pieces, horsepower ratings, and length of use are provided by the Applicant.
Vehicle Emissions are based on an Santa Barbara County Year 2007 model run of the CARB EMFAC2007 computer model (BURDEN2007 module).
The total daily vehicle emissions for each vehicle class included in the model was divided by the total number of vehicles miles traveled in each class so that an average emission rate per mile could be determined. Worker vehicles are a composite of light duty autos, light duty trucks under 3,750 pounds, and light trucks between 3,751 and 5,750 pounds. Per the URBEMIS2002 model, the trip lengths are set at 25 miles per round trip for workers and a similar value is applied for trucks. PM10 emissions associated with dust are based on the assumptions included in the URBEMIS2002 computer model distributed by the SCAQMD. The model reports that 10 pounds of PM10 are generated per acre disturbed per day. A control efficiency of 50 percent is then assumed for adherence to SBCAPCD Rules 302 and 303 requiring active dust control and a water truck is included in the equipment roster. Asphalt emissions are based on the URBEMIS2002 model and assume that 2.62 pounds of ROG are released for each acre paved.

INPUT ASSUMPTIONS

Heavy Equipment Emissions (All Diesel Except Where Noted)

Equipment Type	Number Used	Hours per Day	Horsepower
Rollers	1	8	80
Asphalt Pavers	1	8	150
Cranes	1	8	500
Backhoe Loaders	2	8	100
Rubber-Tired Dozers	1	8	240
Concrete/Pumper Trucks	2	8	300
Water Truck	1	8	200

Exhaust Emission Factors (Pounds per Hour)

CO	NOx	ROG	SOx	PM10
0.432295	0.864479	0.144877	0.000691	0.0733566
0.820905	1.854645	0.23608	0.001442	0.1014196
0.848829	2.104129	0.212131	0.001766	0.0818928
0.374412	0.697276	0.117703	0.000606	0.0633707
0.884909	2.798975	0.313953	0.002063	0.1237037
0.945299	2.851157	0.286847	0.002671	0.1050941
0.509604	1.997141	0.193197	0.001872	0.0709218

Mobile Source Emissions

Vehicle Class	Number Round-Trips	Miles per Round-Trip
Workers (Inc. Autos & Trks Under 5,750 Lbs)	20	25
Med Heavy & Heavy-Heavy Trucks (14,001 - 60,000 lb)	5	25

Exhaust Emission Factors (Pounds per Mile)

CO	NOx	ROG	SOx	PM10
0.016077	0.001678	0.001678	9.4E-06	0.0001091
0.051875	0.042	0.006	0	0.002875

Dust Emissions

Area Disturbed	Acres Disturbed
Active Area	2.5

PM10 Emission factor (Pounds per Acre per Day)

PM10
5.00

Asphalt Emissions

Area Disturbed	Acres Disturbed
Active Area	2.5

ROG Emission factor (Pounds per Acre)

ROG
2.62

OUTPUT VALUES

Heavy Equipment Emissions	Exhaust Emissions (Pounds per Day)					Weeks	Exhaust Emissions (Tons per Year)				
Equipment Type	CO	NOx	ROG	SOx	PM10		CO	NOx	ROG	SOx	PM10
Rollers	3.46	6.92	1.16	0.01	0.59	3	0.03	0.05	0.01	0.00	0.00
Asphalt Pavers	6.57	14.84	1.89	0.01	0.81	3	0.05	0.11	0.01	0.00	0.01
Cranes	6.79	16.83	1.70	0.01	0.66	8	0.14	0.34	0.03	0.00	0.01
Backhoe Loaders	3.00	5.58	0.94	0.00	0.51	8	0.06	0.11	0.02	0.00	0.01
Rubber-Tired Dozers	7.08	22.39	2.51	0.02	0.99	4	0.07	0.22	0.03	0.00	0.01
Concrete/Pumper Trucks	7.56	22.81	2.29	0.02	0.84	10	0.19	0.57	0.06	0.00	0.02

Water Truck	4.08	15.98	1.55	0.01	0.57	4	0.04	0.16	0.02	0.00	0.01
Total Equipment Emissions	38.53	105.34	12.04	0.09	4.96		0.57	1.57	0.17	0.00	0.07

Mobile Source Emissions	**Exhaust Emissions (Pounds per Day)**					**Weeks**	**Exhaust Emissions (Tons per Year)**				
Vehicle Class	**CO**	**NOx**	**ROG**	**SOx**	**PM10**		**CO**	**NOx**	**ROG**	**SOx**	**PM10**
Workers (Inc. Autos & Trks Under 5,750 Lbs)	8.04	0.84	0.84	0.00	0.05	22	0.44	0.05	0.05	0.00	0.00
Med Heavy & Heavy-Heavy Trucks (14,001 - 60,000 lb)	6.48	5.25	0.75	0.00	0.36	22	0.36	0.29	0.04	0.00	0.02
Total Mobile-Source Emissions	14.52	6.09	1.59	0.00	0.41		0.80	0.33	0.09	0.00	0.02

Dust Emissions	**Dust PM10 Emissions (Pounds per Day)**	**Weeks**	**Dust PM10 Emissions (Tons per Year)**
Area Disturbed	**PM10**		**PM10**
PM10 From Dust Emissions	12.50	22	0.69

Asphalt Emissions	**Asphalt Emissions (Pounds per Day)**	**Weeks**	**Asphalt Emissions (Tons per Year)**
Area Disturbed	**ROG**		**ROG**
ROG From Asphalt	0.13	3	0.00

	Total Emissions (Pounds per Day)					**Total Emissions (Tons per Year)**				
Total Emissions	**CO**	**NOx**	**ROG**	**SOx**	**PM10**	**CO**	**NOx**	**ROG**	**SOx**	**PM10**
	53.05	111.43	13.63	0.09	17.87	1.37	1.90	0.26	0.00	0.78

COMMENT LETTERS RECEIVED

May 2, 2007

Coleen Lund, Project Manager
Santa Barbara County Parks Department
610 Mission Canyon Road
Santa Barbara, CA 93105

SUBJECT: Lake Cachuma Main Boat Ramp Improvements: Mitigated Negative Declaration

Dear Coleen,

The Santa Barbara County Air Pollution Control District (SBCAPCD) appreciates the opportunity to comment on the Draft MND associated with the Lake Cachuma Main Boat Ramp Improvements.

In general, the SBCAPCD concurs that this 20-week long construction project will not significantly affect the air quality of Santa Barbara County. Our comments below focus on corrections that we would like to see in the final MND.

SPECIFIC COMMENTS

1. Page 19, 2nd full paragraph, Existing Air Quality: The document neglects to mention the following key points regarding existing air quality:

    - Santa Barbara County is in attainment of the federal eight-hour ozone standard, but does not meet the state one-hour ozone standard or the state standard for particulate matter less than ten microns in diameter (PM10).
    - Santa Barbara County has been in attainment of the state CO standard for many years and ambient CO levels have declined significantly. Therefore, the SBCAPCD no longer requires analysis of CO "hotspot" emissions.
    - The state adopted a new eight-hour ozone standard. Although the state has not yet issued attainment designations, our data indicate we will be considered in nonattainment of this standard.
    - There is not yet enough data to determine our attainment status for either the federal standard for particulate matter less than 2.5 microns in diameter (PM2.5) or the state PM2.5 standard.

2. Page 19, 3rd full paragraph, Methodology: The document states that projected air emissions were calculated using the heavy equipment emission factors, as included in the [South Coast Air Quality Management District] SCAQMD CEQA Air Quality Handbook. It is our understanding that this 1993 Handbook has been deemed, for the most part, obsolete by the SCAQMD. We object to the use of emission factors that are not approved by the SBCAPCD for this Santa Barbara County project. EMFAC 2007 or SBCAPCD emission factors which are available on our website should be used. The document states that the

emissions were compared to thresholds of significance in three different publications and incorrectly states that all three publications include the same threshold values. Please delete this sentence.

3. Page 22, Impact Discussion: The MND includes SBCAPCD's long-term operational, air quality thresholds of significance. The document should clearly and succinctly state which thresholds, if any, County Parks, as the lead agency, will be using for this construction project. The SBCAPCD APCD uses 25 tons per year for ROG or NOx as a guideline for determining the significance of construction impacts and County Parks may choose to use this guideline. This should be clearly stated in the MND.

4. Page 23, first paragraph, 3rd sentence: This section and the section on mitigation on Page 26, list some SBCAPCD prohibitory rules. Please note that SBCAPCD Rule 305 does not apply to grading.

5. Page 24. Please see comment above regarding SBCAPCD's objection to the use of the obsolete SCAQMD 1993 CEQA Handbook to calculate the emissions for this project.

6. Page 25, 2nd full paragraph, Microscale Projections: Please add, "Santa Barbara County has been in attainment of the state CO standard for many years and ambient CO levels have declined significantly. Therefore, the SBCAPCD no longer requires analysis of CO emissions."

7. Page 25, Consistency with Air Quality Planning: Please correct this discussion to note that the 2004 Clean Air Plan is the most recent plan adopted by the SBCAPCD Board. In the interest of full disclosure, please add that the Draft 2007 Clean Air Plan has been released and is expected to be adopted by the SBCAPCD Board in mid-2007.

Please contact me at 961-8893 if you have any questions.

Sincerely,

Vijaya Jammalamadaka

Vijaya Jammalamadaka
Air Quality Specialist
Technology and Environmental Review Division

cc: Bobbie Bratz, SBCAPCD, Public Information and Community Programs Supervisor
Project File (County Parks: Lake Cachuma Main Boat Ramp Improvements)
TEA Chron File

||sbcapcd.org|shares|groups|pca|wp|pcacorr|lake cachuma main boat ramp improvements mnd.doc