Chapter 4.8
RECREATION

4.8.1 Introduction

This chapter presents an overview of recreational activities in the Program Area, and impacts related to the Proposed Program. Due to the size of the Program Area, this section focuses primarily on the publically-open lands as managed by city, state, and federal agencies; however, privately-operated and owned areas are briefly discussed.

4.8.2 Regulatory Setting

U.S. Forest Service’s National Forests

The U.S. Forest Service manages the National Forests under the direction of approved land and resource management plans (also known as “forest plans”) as required under Section 6 of the Forest and Rangeland Renewable Resources Planning Act (Resources Act) of 1974 (U.S. Forest Service, 2004). The Resources Act requires that the U.S. Forest Service: 1) establish guidelines (i.e., planning rules) that set up the process for the development and revision of land management plans; and 2) develop, maintain, and, as appropriate, revise integrated management plans for each national forest unit (U.S. Forest Service, 2009a; 2004).

Land and resource management plans must comply with the following goals of the Resources Act:

- Consider the economic and environmental aspects of various systems of renewable resource management to provide for outdoor recreation, range, timber, watershed, wildlife, and fish;
- Provide for diversity of plant and animal communities based on the sustainability and capability of the specific land area in order to meet overall multiple-use objectives;
- Allow for the research and evaluation of the effects of each management system to prevent substantial and permanent impairment of the land’s productivity;
- Permit increases in harvest levels based on intensified management practices, such as reforestation, in accordance with the Multiple-Use Sustained-Yield Act of 1960;
- Ensure that timber is harvested from National Forests only where the designated conditions are met; and
- Ensure that clearcutting and similar activities will be used only in certain circumstances (U.S. Forest Service, 2004).
The land management plan provides strategic management direction for the overall management of a National Forest. Supplemental resource management plans may also be prepared to provide more specific direction on actions or protective measures that will be taken for a particular resource. For example, a water quality resources management plan may provide specific projects or best management practices that the U.S. Forest Service will implement to improve or protect water quality in a particular forest over the next 15 years. However, all resource management plans must be consistent with the applicable land management plan (U.S. Forest Service, 2004).

**National Landscape Conservation System**

In the year 2000, the Secretary of the Interior officially recognized certain specially designated public lands as part of a newly created National Landscape Conservation System (NLCS). The NLCS includes 880 special areas that are designated as Wild and Scenic Rivers, National Conservation Areas, Wilderness Areas, and National Historic and Scenic Trails, among others. These areas may be managed by one or more state or federal agencies including the Bureau of Land Management (BLM), National Park Service, U.S. Forest Service, U.S. Fish and Wildlife Service (USFWS), and the State of California Department of Water Resources, Department of Fish and Game, or California Department of Parks and Recreation (CDPR). However, as nationally recognized public lands, they are similarly managed to conserve, protect, and restore nationally significant landscapes recognized for their outstanding cultural, ecological, and scientific values. (BLM, 2009a)

**California State Parks**

California State parks are broadly administered under the State Park System Plan, a state-wide planning document which identifies programs and initiatives based on California’s future trends and needs. More focused detailed planning is provided by “general plans” for individual parks. These general plans direct the long-term development and management of park areas through policy and program guidance. An approved general plan must be in place for the State Park prior to the development of any major park facilities. (California State Parks, 2010a)

**4.8.3 Environmental Setting**

Opportunities for the enjoyment of recreational activities in California are available within lands owned by federal, state, and local governments and on privately owned land. Figure 4.8-1 illustrates the federal, state, and private recreational land ownership throughout the state of California (BLM, 2009b). Most recreational lands are federally owned and managed by the U.S. Forest Service or the BLM. The sections below further describe the types of recreational lands in California and the recreational activity types and frequencies.

**National Forest Areas of California**

Eighteen National Forests are located in California and comprise approximately 20 million acres. These National Forests are located in the North Coast, Cascade, and Sierra Nevada ranges and from Big Sur to the Mexican border in the south Coast range (U.S. Forest Service, 2009b). Typical recreational opportunities available in California’s National Forests may include but are not limited to: hiking, mountain biking, rock climbing, picnicking, a wide variety of beach and water sports, horseback riding, cycle touring, wildlife watching, skiing,
Figure 4.8-1
Recreational Lands in California

snowboarding, ice skating, sledding/tubing, snowmobiling and snowshoeing (U.S. Forest Service 2010).

Table 4.8-1 summarizes the acreage and average visitation totals for each forest. National Forest areas range in size from approximately 568,634 up to 2,813,997 acres (U.S. Forest Service, 2009c). The Lake Tahoe region (which includes both the Lake Tahoe Management Unit and the Tahoe National Forest) had the greatest number of visitors during 2000-2004.

**TABLE 4.8-1. SUMMARY OF CALIFORNIA NATIONAL FOREST STATISTICS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Angeles</td>
<td>694,175</td>
<td>3,226,000</td>
</tr>
<tr>
<td>Cleveland</td>
<td>568,634</td>
<td>1,262,000</td>
</tr>
<tr>
<td>El Dorado</td>
<td>887,643</td>
<td>2,201,000</td>
</tr>
<tr>
<td>Inyo</td>
<td>1,940,766</td>
<td>4,229,000</td>
</tr>
<tr>
<td>Klamath</td>
<td>1,886,725</td>
<td>536,000</td>
</tr>
<tr>
<td>Lake Tahoe</td>
<td>1,239,729</td>
<td>3,217,000</td>
</tr>
<tr>
<td>Lassen</td>
<td>1,375,593</td>
<td>783,000</td>
</tr>
<tr>
<td>Los Padres</td>
<td>1,963,836</td>
<td>1,507,000</td>
</tr>
<tr>
<td>Mendocino</td>
<td>1,079,850</td>
<td>281,000</td>
</tr>
<tr>
<td>Modoc</td>
<td>1,979,327</td>
<td>108,000</td>
</tr>
<tr>
<td>Plumas</td>
<td>1,400,902</td>
<td>947,000</td>
</tr>
<tr>
<td>San Bernardino</td>
<td>823,816</td>
<td>1,756,000</td>
</tr>
<tr>
<td>Sequoia</td>
<td>1,193,315</td>
<td>1,657,000</td>
</tr>
<tr>
<td>Shasta-Trinity</td>
<td>2,813,997</td>
<td>2,763,000</td>
</tr>
<tr>
<td>Sierra</td>
<td>1,412,801</td>
<td>1,872,000</td>
</tr>
<tr>
<td>Six Rivers</td>
<td>1,118,247</td>
<td>392,000</td>
</tr>
<tr>
<td>Stanislaus</td>
<td>1,090,039</td>
<td>1,734,000</td>
</tr>
<tr>
<td>Tahoe</td>
<td>1,239,729</td>
<td>3,932,000</td>
</tr>
</tbody>
</table>

Sources: U.S. Forest Service 2006, 2009c.

**California State Parks**

The California State Park system includes several categories of parks, including state parks, beaches, historic parks, recreation areas, natural reserves, vehicular recreation areas, historical monuments, and state seashores. The specific number or type of areas within the State Park system may vary year to year as areas are added, reclassified, removed, or combined. Table 4.8-2 provides a summary of the total areas, facilities, and visitor attendance during the fiscal years 2001 through 2008.

Generally, the total number of properties and total acreage of the State Park system increased from 2001-2008 while the total visitor attendance declined. The total length of river waterfront areas within the State Park system was approximately 328 miles in fiscal year 2007/2008 (CDPR, 2009).
### TABLE 4.8-2. DATA FROM CDPR’S THE CALIFORNIA STATE PARK SYSTEM STATISTICAL REPORT 2001–2008

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total # of Properties</th>
<th>Total Acreage (total miles of river frontage)</th>
<th>Available Campsites</th>
<th>Non-camping overnight facilities*</th>
<th>Total Attendance</th>
<th>Attendance Breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Individual*</td>
<td>Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01/02</td>
<td>266</td>
<td>1,433,096.0 ac (292.1 mi)</td>
<td>15,142</td>
<td>227</td>
<td>85,537,217</td>
<td>78,619,687</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,917,530</td>
</tr>
<tr>
<td>02/03</td>
<td>273</td>
<td>1,460,697.0 ac (319.56 mi)</td>
<td>14,823</td>
<td>230</td>
<td>82,784,064</td>
<td>75,822,775</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,961,289</td>
</tr>
<tr>
<td>03/04</td>
<td>277</td>
<td>1,488,342.1 ac (316.34 mi)</td>
<td>14,795</td>
<td>262</td>
<td>82,028,457</td>
<td>75,015,737</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,012,720</td>
</tr>
<tr>
<td>04/05</td>
<td>278</td>
<td>1,505,571.9 ac (325.60 mi)</td>
<td>14,343</td>
<td>272</td>
<td>77,079,564</td>
<td>71,007,189</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,072,375</td>
</tr>
<tr>
<td>05/06</td>
<td>278</td>
<td>1,556,426.22 ac (326.6 mi)</td>
<td>14,187</td>
<td>258</td>
<td>76,130,726</td>
<td>69,479,605</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,130,121</td>
</tr>
<tr>
<td>06/07</td>
<td>278</td>
<td>1,556,426.22 ac (327.2 mi)</td>
<td>14,264</td>
<td>262</td>
<td>79,828,629</td>
<td>71,807,812</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8,020,817</td>
</tr>
<tr>
<td>07/08</td>
<td>278</td>
<td>1,560,623.2 ac (327.99 mi)</td>
<td>13,542</td>
<td>321</td>
<td>79,967,354</td>
<td>72,189,693</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,777,661</td>
</tr>
</tbody>
</table>

*=decreases from 01/02 data due to errors in previous year’s estimates, not actual losses in available sites.

During the most recent year for which information is available (i.e., the 2007/2008 fiscal year), the California State Park system included a total of 278 areas (CDPR, 2009). The size of individual areas in the system ranged from 0.11 to 584,170 acres, at the Watts Tower of Simon Rodia State Historic Park and the Anza-Borrego Desert State Park, respectively. During this time period, total annual visitor attendance was greatest (e.g., an estimated 6,490,800 visitors) at the Old Town San Diego State Historic Park (CDPR, 2010b). Some parks do not record the number of visitors because of their small size, expected low visitation rate, or budget restrictions (CDPR, 2009).

Potential recreation activities allowed within the state parks include but are not limited to: picnicking, camping, hiking, participation in interpretive or education programs, observation of cultural and historic resources, boating, swimming, kayaking, rafting, fishing, wildlife viewing, and the riding of off-highway motor vehicles. The recreation opportunities available may differ between the various state park areas, depending on the facility type, resources, location, and other factors.

**Lands with Special Designation**

As previously described, there are several different types of specially designated lands in the National Landscape Conservation System. While these areas vary in location, size, and setting, they are all recognized for their outstanding resources and are managed in such a way as to protect and enhance these features. Unless otherwise noted, the following information was obtained from the Bureau of Land Management's website *The National Landscape Conservation System* (BLM, 2010).

**Wild and Scenic Rivers**

Over 1,973 miles on 23 rivers are designated as Wild and Scenic in California. This national designation was created in 1968 by Congress to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for existing and future generations. Rivers may be classified as wild, scenic, or recreational. Regardless of classification, each designated river is managed with the goal of protecting and enhancing the values that caused it to be designated. While designation does not prohibit development or designate the federal government or other agency control over private property in the area, it does allow for stewardship through programs of federal, state, and tribal entities. A key aspect of the designation is the restriction on federal actions or developments which would restrict flows to these rivers (dams, etc). (USFWS, 2007a)

**National Conservation Areas**

Congress bestows this designation to areas which feature exceptional natural, recreational, cultural, wildlife, aquatic, archeological, paleontological, historical, educational, and/or scientific resources. Similar to Wild and Scenic Rivers, these National Conservation areas are managed with the goal of conservation, protection, enhancement, and benefit and enjoyment of present and future generations.

Nearly 26 million acres are included in the California Desert and the King Range National Conservation areas of California (BLM, 2005). This acreage represents the total land area within the conservation area, and may be owned or managed by one or more state, federal, or private entities. The King Range National Conservation Area was established in 1970 and...
encompasses the coastline area between the Mattole River and the Sinkyone Wilderness State Park, and is better known as the Lost Coast. Designated in 1976, the California Desert Conservation Area encompasses nearly 25 million acres in southern California, extending from northwest of the City of Ridgecrest south to El Centro. This large expanse of area includes sand dunes, canyons, 90 mountain ranges, and over 65 wilderness areas (Center for Biological Diversity, 2010).

**Wilderness Areas**

The Wilderness Act requires that areas designated or considered for wilderness preservation must possess several special characteristics including an existing good natural condition, offer outstanding opportunities for solitude or primitive and unconfined recreation, and being at least 5,000 acres or greater in size. In California alone, the U.S. Congress has designated 82 wilderness areas in California, totaling over 3.8 million acres (BLM 2009a). This is about 3.7% of the land acreage of California. According to the BLM, these areas are places of solitude where people can experience freedom from society and renew the human spirit through association with the natural world. These areas are managed in such a way to maintain these qualities for existing and future generations. Mechanized equipment, including suction dredging equipment, is not allowed in these designated areas.

**Other National Areas**

*Historic and Scenic Trails*

Another component of the National Landscape Conservation System includes areas designated as National Historic and Scenic Trails. National Historic Trails are extended pathways that closely follow a historic trail or route of travel of national significance. Historic designation identifies and protects historic routes, historic remnants, and artifacts for public use and enjoyment. National Scenic Trails, on the other hand, provide maximum outdoor recreation potential and promote the conservation and enjoyment of the various qualities of the areas they pass through.

Three National Historic Trails (the California, Juan Bautista de Anza, and Old Spanish trails) and one Scenic Trail (the Pacific Crest trail) are located in California and total approximately 580 miles.

*National Monuments*

National Monuments are protected historic landmarks, historic and prehistoric structures or other objects of historic or scientific interest, as designated by Congress or the President. Currently, there are three designated national monuments in California: the Carrizo Plain, Santa Rosa/San Jacinto Mountains, and the California Coastal national monuments. Each area specifies the permitted recreational activities that are allowed in national monument areas, in addition to other management strategies, such as livestock grazing. For example, while camping, hiking, biking, horseback riding, and hunting activities are allowed in the Carrizo Plain Monument, the area is withdrawn from any new mineral entry.

*Forest Reserves and Outstanding Natural Areas*

The Headwaters Forest Reserve, located in Humboldt County, is the only designated forest reserve in California. This 7,400 acre area has been set aside to protect and preserve the
ecological and wildlife values of the old-growth redwood and stream systems which provide
habitat for the marbled murrelet and coho salmon species. The area is open for day use only
and recreation is limited to passive activities on trails; more intensive recreational activities
(motorized access, hunting, vegetation gathering, and swimming) are not allowed.

Similarly, there is one designated Outstanding Natural Area in California: the Piedras
Blancas Light Station. Situated on the central coast, just north of San Simeon, this area
provides only limited, scheduled access to tour the lighthouse and the public is not allowed
on wetlands, intertidal zones or other sensitive areas in the Area.

Other Recreational Areas

Recreational opportunities are also available on privately-owned lands or lands owned by
local agencies such as cities and counties. Potential recreation activities that may occur on
private lands include but are not limited to: hunting, fishing, concerts, camping, swimming,
boating, bird watching, hiking, golf, and wine-tasting. Private land owners generally are
responsible for the management of their recreation areas but may provide recreational
opportunities to the public with the assistance or cooperation of federal and state agencies.
As an example, the U.S. Forest Service’s Pacific Region provides financial and technical
assistance to private organizations through its State & Private Forestry (S&PF) program to
help protect forest resources and assist landowners in practicing good quality land
management (U.S. Forest Service, 2009b).

In addition to private lands, local agencies such as counties and cities provide and manage
park and recreation resources in accordance with the applicable general plan(s) and
policies. Recreational opportunities offered by local agencies may include parks, recreation
centers, and organized group activities, such as softball or soccer leagues. As an example,
Yuba County utilizes a Parks Master Plan to guide park development, identify necessary
recreational facility improvements, and provide a set of goals and objectives that can be
used to evaluate any new future projects (Yuba County, 2008).

Recreational Activities and Participation in California

California provides nearly endless recreational possibilities. For the purposes of this
evaluation, activity types are grouped into two categories: those which are land-based, and
those which are water-based. The activities within these categories are further grouped as
being either motorized or non-motorized, as discussed below. While other recreational
activities may take place in the Program Area, these two categories and the associated
recreational activities comprise the primary forms of recreation that may affect, or be
affected by, implementation of the Program.

Land-Based Recreation and Participation

Land-based recreational activities are those which occur primarily on land. These activities
may include the use of motorized equipment, for example; all-terrain vehicle (ATV) uses
and recreational vehicle (RV) camping. Non-motorized land based activities include
camping, hiking, picnicking, horse-back riding, and wildlife or scenery viewing.

National surveys for recreational participation as coordinated by the U.S. Fish and Wildlife
Service are shown in Table 4.8-3. As shown in the table, there were over 3 million
participants in hunting and wildlife viewing activities in 2006. While hunting participation has declined by 45% since 1996, the number of wildlife watchers has remained steady.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fishing</th>
<th>Hunting</th>
<th>Wildlife Watching*</th>
<th>Total**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Participants</td>
<td>Average days per year</td>
<td>Total Participants</td>
<td>Average days per year</td>
</tr>
<tr>
<td>1996</td>
<td>2,722,000</td>
<td>14</td>
<td>515,000</td>
<td>14</td>
</tr>
<tr>
<td>2001</td>
<td>2,444,000</td>
<td>11</td>
<td>274,000</td>
<td>13</td>
</tr>
<tr>
<td>2006</td>
<td>1,730,000</td>
<td>11</td>
<td>281,000</td>
<td>12</td>
</tr>
</tbody>
</table>

*= Includes only participants who travel and/or overnight for activity.
**= Total also includes wildlife watchers who participate within 1 mile of residence and are not included in the wildlife watching column. In addition, the total does not double-count recreationists who participated in more than one wildlife-related activity.


On average hunters and wildlife viewers spent between 12 and 16 days per year participating in these activities in California. This corresponds with the National Sporting Goods Association (NGSA) survey which indicated that the average number of days for overnight camping was 13.42 in 2007 for California (NGSA, 2008).

Water-Based Recreation and Participation

Recreational activities that are water-based include those which occur on or along the inland waterways of California. Depending on the specific equipment requirements of the activity, water-based recreation may include the use of mechanized devices powered by motors or engines. Such activities include boating, suction dredging, and personal watercrafting. Non-motorized water recreation includes activities such as fishing, snorkeling or SCUBA diving, kayaking, rafting, and swimming.

Long-term data from the National Survey on Recreation and the Environment indicates that lakes, rivers and streams have always been of interest to recreationists and pressure on these resources is expected to continue to grow over time. Nationally, canoeing/kayaking has grown nearly tenfold since 1960, from 2.6 million to 27 million. During the same period in California, the percentage of the state’s population participating in the following activities at least once during the year includes: swimming in lakes and streams (37.9%), visiting other watersides (besides beaches) (24.5%), viewing and photographing fish (22.1%), boat tours or excursions (20.1%), coldwater fishing (13.8%), anadromous fishing (5.7%), rafting (7%), canoeing (4.3%), and kayaking (4.4%) (Cordell, 2004). Additionally, the USFWS National Survey data indicates that on average, just over 2 million participants fished in California each year between 1996 and 2006 (see Table 4.8-3).
Oftentimes suction dredging and similar mining activities are not included in recreational surveys. However, suction dredging is a self-described recreational activity. CDFG conducted a survey of suction dredge mining operations during the development of this SEIR. The survey and a summary of results are presented in Appendix F, and the following conclusions are presented here:

- Of the in-state permit holders, approximately 82% of those surveyed identified themselves as "recreational" miners, while approximately 74% of out-of-state permit holders identified themselves as such;
- Approximately 72% of California-resident permit holders reported that they typically drove off paved roads to access dredging sites, of which 87% indicated that they used a car or truck in doing so. A smaller percentage of non-Californian permit holders typically drove off paved roads (68%); though of those who did, a similar percentage used a car or truck;
- Nearly three quarters of in-state respondents indicated that they stayed overnight when dredging, whereas nearly all out-of-state respondents (98%) reported doing so;
- When staying overnight, the majority of respondents stayed in either developed or undeveloped campgrounds. Both resident and non-resident permit holders indicated that of the developed campgrounds, State and privately-owned campsites were used most; whereas for undeveloped camp locations, federally-owned campgrounds were the most highly frequented; and
- California resident permit holders reported taking numerous short trips (averaging 14.69 trips and 30.06 total days dredging); whereas non-resident permit holders reported less frequent, but longer yearly trips (averaging only 4 trips and a total of 33.39 dredging days).

Additionally, suction dredge mining participation in California can be evaluated from the records of permits issuance by CDFG. As previously detailed in Chapter 3, there was a dramatic spike in the number of permits issued between 1980 and 1981, with a steady decline thereafter. The most recent data indicates that permit issuance is similar to 1976 levels, and the proposed regulations would establish a maximum permit issuance of 4,000 per year. The Suction Dredger Survey also indicated that the locations most visited for suction dredging include Siskiyou, Sierra, and Plumas counties (Chapter 3, Table 3-3). As shown in Figures 3-5 and 3-6 in Chapter 3, the greatest intensity of dredging for in-state permit holders occurred in the Yuba, and Feather rivers, whereas out-of-state permit holders most frequented the Klamath River.

### 4.8.4 Impact Analysis

The methodology described below accounts for activities conducted in accordance with the proposed regulations contained in Chapter 2. Additional or more extensive impacts related to recreation may result for those suction dredge activities requiring notification under Fish and Game Code section 1602. Notification is required for the following activities:

- Use of gas or electric powered winches for the movement of instream boulders or wood to facilitate suction dredge activities;
- Temporary or permanent flow diversions, impoundments, or dams constructed for the purposes of facilitating suction dredge activities;
- Suction dredging within lakes; and
- Use of a dredge with an intake nozzle greater than 4 inches in diameter.

A general description of how such activities requiring Fish and Game Code section 1602 notification would deviate from the impact findings are described at the end of the impact section below.

**Findings of 1994 Environmental Impact Report**

The 1994 EIR found that conflicts between suction dredgers and other recreational users were generally outside of the jurisdiction of CDFG and were only included for informational purposes. The 1994 report considered the effects of suction dredging on two forms of recreation: rafting and fishing. Both rafting and fishing participants were found to experience a high degree of conflict with suction dredging. For rafters, conflicts arise from noise, engine exhaust, and physical presence of dredges in the waterway. Fishing participants are additionally disturbed by access barriers (intimidation, lack of parking, equipment conflicts), safety issues (dredge holes), and localized effects on fish (turbidity, disturbance). However, the report concludes that suction dredging is a legitimate recreational activity and is afforded equal rights to use public lands to participate in the activity, so long as it is done in a legal manner.

**Methodology**

This section describes the methods used to determine the Proposed Program’s impacts and lists the thresholds used to conclude whether an impact would be significant. Impacts of the Proposed Program are evaluated qualitatively, based on the potential for the Program to disrupt existing recreational access and uses. Generally, short-term loss of recreational opportunities can occur by disrupting use of, or access to, recreation areas or facilities. A long-term effect could occur if a recreational opportunity is eliminated as a result of implementation of the Proposed Program.

The methodology used to assess recreation resource impacts from the Program include the following:

1) Identify potential recreational resources throughout California with a focus on recreational activities near or within potential suction dredge mining areas;
2) Assess the quality of those resources; and
3) Identify the importance to people, or sensitivity, of recreational resources in the Program Area.

By establishing the baseline (existing) conditions, the Proposed Program and any resulting change to the recreation activities and facilities can be objectively evaluated for its degree of impact. The degree of impact depends both on the magnitude of change in the recreational resource (i.e., quality) and on recreationists’ responses to and concern for those changes. Implementation of the Program was evaluated based on the potential to impact other...
recreational groups. Impacts on recreation related to aesthetics, noise, hazards, etc. have been addressed in those respective chapters.

**Criteria for Determining Significance**

For the purposes of this analysis, the Proposed Program would result in a significant impact if it would:

- substantially degrade the quality of recreational resources or experiences;
- alter the use of existing recreational facilities such that substantial physical deterioration of the resource would occur; or
- substantially change the availability of recreational resources in the vicinity of the project site.

**4.8.5 Environmental Impacts**

**Impact REC-1: Effects on the Quality of Recreational Resources or Experience (Less than Significant)**

Interpersonal or social values related conflicts may arise between suction dredge mining activities and other recreational uses in the Program Area. As described above, diverse recreational uses may occur near or within the Proposed Program Area and may include land-based, water-based, motorized, or non-motorized activities. Interpersonal conflicts between these recreational uses may occur if the physical presence or activities of a group interfere with the goals of another group (e.g., snowmobilers and cross-country skiers) (Bernell et al., 2003). Social value related conflicts may occur if individuals or parties of recreationists do not share the same lifestyle and opinion about the kinds of activities and behavior that are appropriate in wildland recreation areas (e.g., a tent camper in proximity to RV campers) (Bernell et al., 2003). Generally, the main conflicts between recreation groups occur between those who participate in “human-powered” activities and those who prefer motorized activities (Bernell et al., 2003).

The degree of conflict that may occur between suction dredge mining activities and other recreational uses varies widely between user groups that might be exposed to the Proposed Program's activities, and is largely based on personal perception of the activity. Suction dredging activities are motorized activities that involve both water-based (i.e., suction dredging) and land-based (ex., overnight camping) components. Thus, suction dredging activities may create a greater perceived conflict for recreationists who participate in non-motorized or "human-powered" activities (ex., hiking, rafting, fishing) than for recreationists participating in other “motorized” activities (ex, power boating) in the Proposed Program Area. Similarly, other recreationists may degrade or conflict with the recreational experience of the suction dredge miners. As an example, in Oregon's waterways, most conflicts between other recreationists and suction dredge miners were related to noise, level of development, degraded ecological conditions, and differences in social values (Bernell et al., 2003). Based on anecdotal reports, suction dredge mining can also serve as a source of interest and a compatible recreational use for other recreationists. On the other hand, the physical presence of miners may result in interpersonal conflicts with other recreationists, such as boating safety hazards. However, in the study conducted in Oregon, this was not the cause of most conflicts (Bernell et al., 2003). Overall, the
Proposed Program's potential impacts on the perceived quality of recreation resources or recreation experience of recreationists in the Program Area are anticipated to encompass a range, from adverse to beneficial.

As discussed above, some of the potential conflicts that can occur between suction dredge miners and other recreationists are related to perceptions that ecological conditions have been degraded by suction dredge mining. The regulations under the Proposed Program include numerous measures to protect and restore ecological conditions during and after suction dredge mining activities. Some of the applicable regulations include restrictions related to, chemical storage and use, equipment cleaning, vegetation removal or disturbance, and the disturbance of stream substrates or flows. Similarly, the "Best Management Practices" informational packet to be distributed by the CDFG will provide guidance regarding equipment storage, waste disposal, and proper conduct as it relates to suction dredging activities. Adherence to the guidelines and enforcement of the proposed regulations would reduce the potential for conflicts associated with suction dredge activities.

Finally, there are a relatively small number of suction dredge miners compared to the number of other recreationists in California, and most public recreational areas are managed to provide diverse opportunities for a wide variety of recreational activities and experiences, including suction dredging. Therefore, while individual instances may occur where non-suction dredging recreational resources or experiences may be substantially degraded under the Program; these occurrences are not expected to happen so frequently or for a long enough period of time to be considered substantial. Additionally, when taken as a whole, the overall impact on the quality of recreational resources, or the experiences of recreationists, in California, is not believed to be substantial. This impact is considered less than significant.

**Impact REC-2: Changes in Recreational Facility Use or Availability (Less than Significant)**

The Proposed Program would result in the occupation of limited portions of trails and/or recreation areas by suction dredge miners for access, staging, and suction dredging activities. Occupation or use of these trails and/or recreational areas by suction dredge miners could potentially affect the availability of these recreational facilities for other recreationists and result in the potential accelerated deterioration of nearby facilities if other recreationists were displaced. However, the access, staging, and dredging activities associated with suction dredge mining would be temporary and intermittent and would not cause entire trails or facilities to become unavailable. Furthermore, the "Best Management Practices" informational packet will identify site access and staging methods that demonstrate courtesy to other area users, as well as additional measures to reduce the potential for conflicts.

In addition, dredging operations typically take place on public lands, where the right to use the area is equally applicable to all users. While anecdotal observations have cited instances where miners have, in effect, excluded other recreationists from the use of a particular location, this is believed to only occur infrequently, and numerous other locations remain for others to recreate. Moreover, any actions by miners to illegally exclude other recreationists from using a public area would be a law enforcement issue, to be handled by
the appropriate agency with jurisdiction over the affected area. Based on the quantity of suction dredge permits issued in recent years, the number of suction dredgers that would potentially use public recreational facilities in California would comprise only a very small portion of the millions of recreationists participating in other activities. Overall, the Program is not anticipated to result in a substantial decrease in available recreational areas. Thus, the Program would not result in a significant displacement of recreational users that could accelerate the deterioration of nearby facilities. This impact would be less than significant.

**Activities Requiring Fish and Game Code Section 1602 Notification**

Activities requiring notification under Fish and Game Code section 1602 are likely to result in greater visual and noise disturbances associated with the use of larger nozzle sizes, power winching and dredging in lakes. Such methods could decrease the quality of recreational experiences by potentially increasing adverse effects associated with turbidity plumes, displacement of natural features, usage and staging of additional equipment, and presence of activities in areas which would not otherwise be subject to the activity. Furthermore, the creation of dams or diversions could create physical barriers or alterations which may result in adverse changes to the area's recreational use. Such issues, to the extent to which they could be significant, would need to be evaluated in a CEQA document.