

3.16 Recreation

3.16.1 Introduction

This section describes recreation activities and resources in the study area and evaluates potential impacts on recreation from the types of restoration projects that would be permitted under the Order.

The environmental setting and evaluation of impacts on recreation resources is based on a review of existing published documents, including city and county general plans and land management plans; information regarding example projects similar to those permitted under the General Order that may be implemented by other agencies; and additional information sources listed in Chapter 8, *References*.

Restoration projects permitted under the General Order could increase the use of existing parks, require construction of new recreational facilities, or otherwise physically affect facilities discussed in this section. This section evaluates the potential for significant effects involving recreational facilities and activities and identifies mitigation measures that could be considered for implementation by projects permitted under the General Order.

No comments specifically addressing recreation were received in response to the notice of preparation (NOP). See Appendix B for the NOP comment letters.

3.16.2 Environmental Setting

This section describes existing recreational resources and areas with recreation opportunities in the study area. Given its size and range of landscapes and water features, the study area contains a wide variety of recreation resources and opportunities. For instance, snowmelt from the Sierra Nevada and other mountain ranges feeds the network of rivers throughout the state, which in turn may spill into floodways. Although the study area encompasses all of California, projects permitted under the Order would occur mainly in areas of aquatic, riparian, and floodplain habitats.

Aquatic Features

Rivers and Streams

River and stream recreation facilities in the study area vary by location, property ownership, and ease of access. In the foothills and mountains, whitewater kayak put-in and take-out locations are frequently available on an “opportunity” basis along public rights-of-way at crossings and often lack improved facilities. National, state, and local parks have been developed at many riverside and stream locations and generally provide improved parking, picnicking, boat launching, sanitation, drinking water facilities, and sometimes camping and developed trails. Bidwell–Sacramento River State Park and Woodson Bridge State Park along the Sacramento River, Burton Creek State Park on Burton Creek, and the Merced River within Yosemite National Park are examples.

Private marinas, launch ramps, and campgrounds also can be found along rivers throughout the study area. Rivers at higher elevations with steeper profiles and often-uncontrolled springtime runoff provide a wide range of whitewater kayak recreation opportunities for individuals and commercial rafters and kayakers.

In addition, the corridors of some rivers and adjacent land areas have been designated as open space parkways, often expanding the value of river corridors for recreation by expanding public access. The American River Parkway and San Joaquin River Parkway are examples of this concept. These river parkways are unique, however, in that many river corridors, banks, and adjacent habitats are in private ownership. The American River Parkway extends more than 25 miles from the confluence with the Sacramento River to recreation lands at Folsom Lake State Recreation Area, which in turn connects to Auburn State Recreation Area, effectively creating a public recreation corridor that extends for some 50 miles.

Lakes and Ponds

More than 9,000 lakes, reservoirs, and dry lakes and countless ponds are scattered throughout the state of California. Recreation facilities in the study area vary by location, property ownership, and ease of access. Most of the lakes in California are United States Navigable Waterways, where areas up to 2 feet past the high-tide line are not available for private ownership as part of the Federal Navigation Act of 1892.

Lakes are typically surrounded by recreational activities such as campgrounds, cabins, resorts, parking, picnicking, boat launching, sanitation, drinking water facilities, and developed trails. Some of the largest lakes within the state include Salton Sea in Southern California, Lake Tahoe in Northern California, Goose Lake located along the border of California and Oregon, Mono Lake in central California, and Honey Lake in the northeastern part of the state.

Ponds in California often act as local swimming holes or offer aesthetic views containing a wide variety of wildlife and aquatic species.

Ocean

The Pacific Ocean is located along California's western border, which results in the state having approximately 95,439 miles of shoreline (NOAA, 1975). Shoreline is defined as outer coast that includes offshore islands, sounds, bays, rivers, and creeks where tidal waters narrow to a width of 100 feet.

Recreational activities in ocean, coastal, and national parks along the coast vary by location, property ownership, and ease of access. A majority of the coastline provides access to beachfront locations to walk along the beach, swim, fish, canoe, surf, and other water activities. Tide pools located in intertidal zones along the shore offer visitors a chance to see seaweeds and other seashore animals (e.g., small fish, eels, crabs, and sea anemones). Some of the most popular beaches in the State include La Jolla Shores Beach, Santa Monica State Beach, Carmel City Beach, Moonstone Beach, San Gregorio State Beach, and Salt Creek Beach. Along with public access spots, California has designated areas as marine protected areas scattered along its coast line that allow varied amounts of activities and protections (e.g., marine reserves, marine conservation

areas, and marine parks) as part of the Marine Life Protection Act passed in 1999 (CDFW 2020).

Amusement parks and piers are common tourist attractions located along the state's shoreline. They offer waterfront seafood restaurants, shopping, attractions, and bay views, along with wildlife viewing for seas lions, sea otters, whales, and other marine wildlife. Some popular attractions along California's coast include Pier 39 in San Francisco, Alcatraz Island in San Francisco Bay, the Santa Cruz Beach Boardwalk, Hearst Castle located in the Los Padres National Forest, and Carmel-by-the-Sea.

Wetlands

California has approximately 454,000 acres of nonagricultural wetlands, with over 90 percent of its historical wetlands being drained primarily due to agricultural purposes (USGS 1996). Wetlands provide countless recreational activities such as hiking, boating, hunting, fishing, trapping, birdwatching, and wildlife photography. Wetlands often co-occur with, and are integral to the health and recreational value of, rivers and streams, lakes and ponds, and the ocean. Some wetlands in California include the Sacramento–San Joaquin Delta, Laguna Wetlands Preserve, Bolsa Chica Ecological Reserve, Los Angeles River, and Ballona Wetlands.

Wildlife-Oriented Recreation

Hunting, wildlife viewing, birdwatching, and viewing of natural scenery (along interpretive, walking, and driving trails) compose wildlife-oriented recreation opportunities throughout the study area. Many wildlife areas and nature observation areas are operated in partnership with other state or local agencies. Types of wildlife areas and hunting facilities include national wildlife refuges, state wildlife areas, private hunting clubs, and private nonprofit wildlife preserves. Popular seasonal recreational activities include waterfowl and pheasant hunting, wildlife viewing, birdwatching, and fishing. In the Central Valley, areas along river floodplains have been established as wildlife refuges, such as Gray Lodge Wildlife Area. Sequoia and Kings Canyon National Parks offer wildlife viewing opportunities for animals such as coyotes, badgers, black bears, sheep, deer, opossums, wolverines, beavers, frogs, muskrats, mountain lions, snakes, foxes, turtles, birds, and fish. These areas provide opportunities for wildlife viewing, fishing, and hunting. Seasonal hunting on private lands requires permission from the landowner, whereas hunting and duck clubs are open to members and their guests only.

Fishing

The aquatic and riparian habitats in the study area are home to a variety of fish species desirable for recreational fishing. Examples of non-commercial fishing activities include bait fishing, bait casting/spin fishing, and fly fishing, which can occur from the shore/bank, wading, or watercraft. Shore/bank and wading fishing can include fishing from piers, levees, and waterway banks. Watercraft fishing can occur from either motorized or nonmotorized watercraft. Fly fishing can be done from both land or watercraft, or anglers can stand in the waterways. Fishing opportunities exist throughout the study area, along the coast, throughout the lower elevation areas, and throughout mountain areas such as the Sierra Nevada and Trinity Alps.

Desert

Recreation

California contains three main deserts: the Mojave Desert by the Tehachapi Mountains, the San Gabriel and San Bernardino Mountains, and California's borders with Arizona and Nevada; the Colorado Desert in the southeast corner of the state, and the Great Basin Desert, which is located to the east of the Sierra Nevada range and extends to Nevada. Deserts provide a wide range of landscapes such as mountains, canyons, sand dunes, and dry cracked earth. Recreational activities within California's deserts vary depending on the season and time of year, and include hiking, rock climbing, bouldering, sightseeing, using off-road vehicles such as sand buggies, and sightseeing. Another recreational activity within some desert areas include playas. Playas (e.g., the Death Valley Playa) are evaporated lakes whose formation depends on climate and location.

Ephemeral Waters

An ephemeral stream or ephemeral river is a stream or river that flows only briefly during and following a period of rainfall within an area and is a common feature of the arid regions of Southern California. One such river within the state is the Mojave River in the San Bernardino Mountains. Unlike a majority of rivers found within California, the Mojave River flows inland instead of toward the ocean. River flows can be seen at the upper narrows and winds down the Afton Canyon before dissipating into the sand. When these arid land streams and rivers are dry, they become popular spots for camping and both legal and illegal off-highway motor vehicles. Playas are also a type of ephemeral water.

Roadways

The California Department of Transportation manages the State Scenic Highway Program, provides guidance, and assists local government agencies, community organizations, and citizens with the process of officially designating scenic highways. In some cases, scenic highways may be located adjacent to aquatic and riparian habitats where restoration projects could occur. Visitors may drive along these scenic roadways to enjoy their aesthetic attributes, such as scenic vistas of waterways and farmland dotted with historic sites. For example, State Route 1 crosses the Carmel River, which may offer aesthetic value to drivers. Another example is State Route 89, which crosses the Sierra Nevada and is a designated scenic highway between the El Dorado–Placer County line to a point 3.2 miles west of U.S. Highway 395. State Route 89 runs along several rivers and streams as well as forestland.

Parks

Parks provide outdoor areas for gathering and recreation and are generally developed and maintained by state or local governments. They include local, small parks and larger parks such as state recreation areas. California has approximately 300 state parks and many more local parks. The National Park System operates a large and diverse group of parks, monuments, and recreation areas including nine national parks, 10 national monuments, three national recreation areas, 850 federally recognized areas

under the National Landscape Conservation System, and four National Marine Sanctuaries. In addition, California includes the Point Reyes National Seashore and the Mojave National Preserve. Park amenities may include restrooms, picnic tables, and fishing access. Additional amenities may include playgrounds, boat launches, trails, and historic site interpretation.

Hiking, Biking, and Trail Use

Trails and paths are often located in areas along the edge of waterways, throughout foothills and mountain ranges, and can be found in parks or wildlife areas, or along shorelines in urban areas. For example, the cities of Sacramento and West Sacramento have public promenades along the Sacramento River. Trails along the San Joaquin River can be found in the cities of Antioch, Pittsburg, and Oakley and in Bay Point. A bike and jogging path along the Calaveras River is accessible in the city of Stockton.

Camping

Tent camping and recreational vehicle sites are located throughout the study area. For example, numerous campsites are located along the North Yuba River and State Route 49. Campsites may offer recreational amenities that provide a variety of activities during vacations or visits. Examples of this type of multi-use facility include recreational vehicle and/or tent camping sites, picnic and barbecue facilities, cafés, and fishing and water access. Camping is also offered in the national parks such as Redwood National Park where tent campgrounds, recreational vehicle campgrounds, and cabins are available.

Historic Sites

The National Register of Historic Places is the official list of the nation's historic places, structures, objects, sites, and districts that have been deemed worthy of preservation because of their significance in American history, architecture, archaeology, engineering, and culture. Designated California historical landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value.

National historic places or California historical landmarks may be located near waterways where there are aquatic or riparian habitats. For example, Sutter's Landing (California Historical Landmark No. 530) is part of Marshall Gold Discovery State Historic Park and located along the South Fork of the American River in Coloma.

3.16.3 Regulatory Setting

This section discusses federal, state, and regional and local plans, policies, regulations, laws, and ordinances pertaining to recreational resources.

Future permitted restoration projects that would be implemented under the General Order may be subject to the laws and regulations listed below, as well as other local or individual restoration projects requirements, depending on the project location.

Federal

Clean Water Act

The Federal Water Pollution Control Act Amendments of 1972, better known as the Clean Water Act, established the institutional structure for the U.S. Environmental Protection Agency to regulate discharges of pollutants into waters of the United States, establish water quality standards, conduct planning studies, and fund grant projects. Congress has amended the Clean Water Act several times since 1972.

The U.S. Environmental Protection Agency has provided most states with the authority to administer many of the provisions of the Clean Water Act. In California, the State Water Board has been designated to develop and enforce water quality objectives and implementation plans. The State Water Board has delegated specific responsibilities for development and enforcement actions to the individual Regional Boards.

Section 303(d) of the Clean Water Act requires states, territories, and authorized tribes to develop a list of water quality-impaired segments of waterways and other water bodies under their jurisdiction. The law requires the jurisdictions to establish priority rankings for the waters they list and to develop action plans, known as total maximum daily loads, to improve water quality.

For descriptions of other parts of the Clean Water Act, see Section 3.6, *Biological Resources—Aquatic*, and Section 3.11, *Hydrology and Water Quality*.

Federal Water Project Recreation Act

Under the Federal Water Project Recreation Act (U.S. Code Title 16, Sections 460[L][12] through 460[L][21]), recreation and fish and wildlife enhancement are to be given full consideration as purposes of federal water development projects if non-federal public bodies agree to do all of the following:

- ◆ Bear no less than half the separable costs allocated for recreational purposes or 25 percent of the cost for fish and wildlife enhancement.
- ◆ Administer project land and water areas devoted to these purposes.
- ◆ Bear all costs of operation, maintenance, and replacement.

Where federal lands or authorized federal programs for fish and wildlife conservation are involved, cost-sharing is not required.

The Federal Water Project Recreation Act also authorizes using federal water project funds for land acquisition to establish refuges for migratory waterfowl when recommended by the Secretary of the Interior. The law further authorizes the Secretary to provide facilities for outdoor recreation and fish and wildlife at all reservoirs under his control, except within national wildlife refuges.

Federal Land and Water Conservation Fund Act

The Land and Water Conservation Fund, created by Congress in 1964, provides money to federal, state, and local governments to purchase land, water, and wetlands for the

benefit of all Americans. Lands and waters purchased through the Land and Water Conservation Fund do all of the following:

- ◆ Provide recreational opportunities
- ◆ Provide clean water
- ◆ Preserve wildlife habitat
- ◆ Enhance scenic vistas
- ◆ Protect archaeological and historical sites
- ◆ Maintain the pristine nature of wilderness areas

State

State Lands Commission

The California State Lands Commission was established in 1938 and provides stewardship of the lands and waterways of California (SLC 2020). The State of California owns nearly 4 million acres of “sovereign lands,” which include the beds of navigable rivers, lakes, and streams, tidal waterways, and tidelands up to the ordinary high-water mark and submerged lands along the coastline extending from the shoreline out to 3 miles offshore. The State Lands Commission may lease sovereign lands for any public trust purpose, including recreation, navigation, fisheries, commerce, and open space. For instance, a public or private entity must lease sites for marinas and recreational piers that fall within sovereign lands. In addition, the State Lands Commission issues permits for dredging lands that fall under its jurisdiction.

California Division of Boating and Waterways

The California Division of Boating and Waterways, part of the California Department of Parks and Recreation, has a mission to provide safe and convenient public access to California’s waterways and leadership in promoting the public’s right to safe, enjoyable, and environmentally sound recreational boating. The California Division of Boating and Waterways endorses boating safety and education, assists local boating law enforcement agencies, ensures uniformity in boating regulations, and licenses boat operators and brokers. The division is also responsible for reviewing, updating, and adopting state boating regulations to reflect changes in federal and state boating laws, and planning and designing state boating facilities. The California Division of Boating and Waterways has been the lead agency for controlling water hyacinth (since 1982) and *Egeria densa* (since 1997) (State Parks 2018).

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) established the State Water Board and divided the state into nine regions, each overseen by a Regional Board. The nine Regional Boards have primary responsibility for the coordination and control of water quality within their respective jurisdictional boundaries. Under the Porter-Cologne Act, water quality objectives are limits or levels of water quality constituents or characteristics established for the protection of beneficial uses.

The Porter-Cologne Act requires the Regional Boards to establish water quality objectives while acknowledging that water quality may be changed to some degree

without unreasonably affecting beneficial uses. Designated beneficial uses, together with the corresponding water quality objectives, and an antidegradation policy also constitute water quality standards under the federal Clean Water Act. The water quality objectives provide requirements for water quality control.

If USACE determines that only no jurisdictional waters of the United States are present in the restoration project area, then no federal CWA permit would be required. Regardless of federal jurisdiction, however, the project will require a permit, or waste discharge requirements (WDRs), for impacts to any waters of the state. The WDRs would be issued by the appropriate Regional Board or, for statewide or multi-regional projects, by the State Water Board. Under the Porter-Cologne Act, discharges to all waters of the state, including all wetlands and other waters of the state (including but not limited to isolated wetlands), are subject to state regulation.

A discharger whose project disturbs one or more acres of soil, or disturbs less than 1 acre but is part of a larger common plan of development that in total disturbs 1 or more acres, must obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities, Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, and disturbances to the ground such as stockpiling or excavation; however, it does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a storm water pollution prevention plan (SWPPP).

California Department of Parks and Recreation

The mission of the California Department of Parks and Recreation is to provide for the health, inspiration, and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation. In addition to the lands it directly owns, the California Department of Parks and Recreation has certain jurisdiction over granted or ungranted tidelands or submerged lands abutting State Park System lands (Public Resources Code Section 5003.5).

Regional and Local

The study area encompasses all counties and all cities throughout California. Each county and city has local regulations and a general plan with unique goals and policies that preserve and guide development of recreation and recreational resources within their local jurisdictions and may identify mitigation measures to protect these resources.

3.16.4 Impacts and Mitigation Measures

Methods of Analysis

Recreational impacts from the types of restoration projects permitted under the Order are evaluated in terms of how typical construction and operation of project components could impact recreation facilities and opportunities in the study area. However, the precise locations and detailed characteristics of potential future individual restoration

projects are not yet known. Therefore, this recreation analysis focuses on foreseeable changes from implementation of the types of projects and actions that might be taken in the future consistent with the level of detail appropriate for a program-level analysis.

Permanent impacts are considered those that would result from indefinite conditions created as a result of restoration projects permitted under the Order (e.g., new infrastructure [setback levees] preventing recreation in that location). Temporary impacts are considered those that would be temporary in nature (e.g., construction-related activities).

The approach to assessing recreational impacts was to identify and review existing environmental studies, data, model results, and other information for projects that are consistent with those identified in Section 2.6, *Categories of Restoration Projects in the Order*, and Section 2.7, *Typical Construction, Operation, and Maintenance Activities and Methods*.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, an impact related to recreation is considered significant if the types of projects that would be permitted under the Order would do either of the following:

- ◆ Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated
- ◆ Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment

In addition, a significant impact would occur if the types of projects that would be permitted under the Order would:

- ◆ Impair, degrade, or eliminate recreational facilities and opportunities

Impacts and Mitigation Measures

Table 3.16-1 summarizes the impact conclusions presented in this section for easy reference.

As part of the State Water Board or Regional Board's issuance of a NOA for a restoration project under the General Order, compliance with the general protection measures and mitigation measures listed below would be required when applicable to a given project. Not all general protection measures and mitigation measures would apply to all restoration projects. The applicability of the general protection measures and mitigation measures would depend on the individual restoration activities, project location, and the potentially significant impacts of the individual restoration project. Implementation of the mitigation measures would be the responsibility of the project proponent(s) under the jurisdiction of the State Water Board, appropriate Regional Board, or other authorizing regulatory agency.

**Table 3.16-1
 Summary of Impact Conclusions—Recreation**

Impact Statement	Construction Activities	Constructed Facilities and Operations and Maintenance
3.16-1: Implementing future restoration projects permitted under the Order could directly impair, degrade, or eliminate recreational resources, facilities, and opportunities.	LTS	LTSM
3.16-2: Future restoration projects permitted under the Order could alter recreational resources or facilities or require the construction or expansion of recreational facilities that could result in environmental impacts.	LTSM	LTSM
3.16-3: Implementing future restoration projects permitted under the Order could increase the use of existing recreational resources and facilities such that substantial physical deterioration would occur or be accelerated.	LTSM	LTSM

Source: Data compiled by Environmental Science Associates in 2019 and 2020

Notes: LTS = less than significant; LTSM = less than significant with mitigation

Impact 3.16-1: Implementing future restoration projects permitted under the Order could directly impair, degrade, or eliminate recreational resources, facilities, and opportunities.

Effects of Project Construction Activities

Construction work for restoration projects permitted under the General Order would include all of the following types of activities:

- ◆ Mobilizing equipment and materials in channels
- ◆ Preparing staging areas
- ◆ Installing temporary construction offices
- ◆ Staging and storing equipment and materials
- ◆ Parking vehicles
- ◆ Using designated access and haul routes
- ◆ Clearing vegetation and structures
- ◆ Preparing borrow sites
- ◆ Restoring and demobilizing from project sites
- ◆ Removing excess materials

These activities could temporarily impair, degrade, or eliminate recreational resources, facilities, and opportunities. For example, work to remove small dams, tide gates, flood gates, and legacy structures could temporarily block boaters’ access to boat launches and other river access areas and adversely impair recreational opportunities for trail users. Another example would be removing a small dam that created a local swimming hole which could impair recreational activities for swimmers. The affected recreation users may then choose to go elsewhere, which could increase the use of other recreational facilities. Additionally, establishing, restoring, or enhancing stream, riparian, or tidal habitats may require permanently relocating or decommissioning existing trails or roads, which could also increase the use of other recreational facilities.

While these types of construction activities may impair recreational activities, they would not be expected to significantly impair, degrade, or eliminate recreational resources, facilities, and opportunities. In addition, a restoration project permitted by the Order could provide new recreational opportunities, which would be beneficial. For instance, improvements to stream crossings and fish passage (e.g., small dam removal) could support safe passage for migratory and non-migratory species. These features would result in increased primary and secondary production and diversification and increased aquatic habitat for a diversity of fish and wildlife species, which could allow for wildlife-oriented recreation (e.g., hunting, fishing, and birdwatching). In addition, restoration projects permitted under the Order such as removal of a small dam could provide increased recreational opportunities in stream or river systems, such as kayaking.

Furthermore, recreational opportunities are abundant throughout the study area, and construction work for restoration projects permitted under the General Order would be temporary and localized. Therefore, impacts on parks, trails, boating, and fishing areas throughout the study area would be less than significant when compared to the total recreation opportunities for the surrounding populations. This impact would be **less than significant**. The Order does not include any general protection measures applicable to this impact.

Effects of Constructed Facilities (Natural or Artificial Infrastructure) and Operations and Maintenance of those Facilities

Restoration projects permitted under the Order could permanently impair or eliminate recreational resources, depending on the project locations and types. Infrastructure may be removed or relocated along streams and in riparian areas. The infrastructure affected may include but would not be limited to boat docks, boat haul-out locations, campgrounds and campsites, day-use sites, and roads/trails and off-highway/off-road vehicle routes in the areas of the restoration projects. For example, constructing a setback levee across a trail in a recreational area would impair the use of that recreational area. Widening a floodway may also preclude the use of recreational facilities because the facilities could be periodically inundated.

Alternatively, a restoration project permitted by the Order could provide new recreational opportunities, which would be beneficial. For instance, removing a small dam could provide increased recreational opportunities in the stream, such as kayaking. In addition, restoration projects such as establishing, restoring, and enhancing tidal, subtidal, and freshwater wetlands could support native marsh plants, provide habitat elements for targeted species, provide other targeted wetland functions, and provide hydrologic variability for fish and other aquatic species. These features would result in increased primary and secondary production and diversification and increased aquatic habitat for a diversity of fish and wildlife species, which would allow for wildlife-oriented recreation such as recreational experiences in the restored areas, hunting, and fishing. This could result in increased recreation resources, which could decrease the use of other existing recreational resources, which would be beneficial.

Impacts attributable to the locations, sizes, and nature of restoration projects could include long-term and permanent changes to recreational resources. However, the specific locations and scale of possible future projects are not currently known.

Therefore, the potential significant recreational impacts in the study area cannot be determined at this time. The factors necessary to identify specific impacts include the size and characteristics of a project, the duration of construction, and the type and precise location of the resource or facility itself. This impact would be **potentially significant**. The Order does not include any general protection measures applicable to this impact.

As part of the State Water Board or Regional Board's issuance of a NOA for a restoration project under the General Order, compliance with Mitigation Measure REC-1 would be required when applicable to a given project. Implementation of this mitigation measure would be the responsibility of the project proponent(s) under the jurisdiction of the State Water Board, appropriate Regional Board, or other authorizing regulatory agency.

Mitigation Measure REC-1: Minimize Impairment, Degradation, or Elimination of Recreational Resources

If restoration projects permitted under the General Order result in the substantial impairment, degradation, or elimination of recreational facilities, replacement facilities of equal capacity and quality shall be developed and installed.

Implementing Mitigation Measure REC-1 would reduce the impact related to impairment, degradation, or elimination of recreational resources to a **less-than-significant** level.

Impact 3.16-2: Future restoration projects permitted under the Order could alter recreational resources or facilities or require the construction or expansion of recreational facilities that could result in environmental impacts.

Effects of Project Construction Activities, Constructed Facilities (Natural or Artificial Infrastructure), and Operations and Maintenance of those Facilities

Construction of restoration projects, constructed facilities (natural or artificial infrastructure), and operations and maintenance of those facilities permitted under the Order could alter or result in the construction or expansion of existing recreational resources, with resulting environmental impacts. For example:

- ◆ Constructing a floodplain restoration project could generate noise that would impair the use of a nearby recreation area. However, the construction-related increase in noise levels would be temporary and would not likely prompt construction of a new recreation facility to replace the loss of use of the existing facility.
- ◆ Constructing a setback levee may require closing a trail for an extended time period. The agency conducting the modification may decide to construct a detour trail around the closure, which may result in erosion and the removal or degradation of habitat.
- ◆ Establishing, restoring, or enhancing stream, riparian, or tidal habitats may require permanently relocating or decommissioning existing trails or roads, which may result in erosion and the removal or degradation of habitat.

- ◆ Restoring upslope watershed areas, floodplain restoration, and multi-benefit restoration projects may include upgrading or expanding recreation facilities such trails or wildlife-oriented recreation.

Restoration projects permitted under the General Order could result in construction, alteration, or expansion of recreational facilities. Some restoration projects would result in long-term and permanent closure or alteration of a recreational use. For example, floodplain restoration may inundate a trail and prompt its long-term and permanent closure. A new trail may be constructed at the new edge of the floodway to replace the closed facility, which may result in erosion and the removal or degradation of habitat. In addition, restoration projects such as establishing, restoring, and enhancing tidal, subtidal, and freshwater wetlands could support native marsh plants; provide habitat elements for targeted species; provide other targeted wetland functions; and provide hydrologic variability for fish and other aquatic species. These features would result in increased primary and secondary production and diversification and increased aquatic habitat for a diversity of fish and wildlife species, which would allow for wildlife-oriented recreation such as recreational experiences in the restored areas, hunting, and fishing. This could result in increased recreation resources and lessen the need for new recreational facilities, which would be beneficial.

In addition, as described in Section 3.15, *Population and Housing*, none of the restoration projects permitted under the General Order would involve constructing new homes, businesses, or other infrastructure that would provide new long-term employment opportunities or result in population growth and demand for housing. Therefore, construction or expansion of recreational facilities (due to an increase in population) would not occur.

Operation and maintenance of projects could include monitoring of vegetation, irrigation systems or other natural structures and operation and maintenance of fish screens. These activities would be temporary in nature and would not likely prompt construction of a new recreation facility to replace the loss of use of the existing facility.

In summary, construction activities and constructed facilities for restoration projects permitted under the General Order could result in the construction and modification of recreational facilities and associated environmental impacts. However, the specific locations and scale of possible future permitted actions are not currently known. Therefore, the locations and characteristics of new or modified recreational facilities in the study area cannot be determined at this time. The factors necessary to identify individual restoration projects impacts include the project's size and characteristics, the duration of construction, and the types and precise locations of construction activities and the facility or resource itself. Because restoration projects permitted under the Order could result in changes to recreational resources that could result in impacts on the environment, this impact would be **potentially significant**.

The Order includes the following general protection measures to reduce this impact (see Appendix E):

- ◆ GPM-6: Work Area and Speed Limits
- ◆ GPM-7: Environmentally Sensitive Areas and/or Wildlife Exclusion

- ◆ GPM-10: Equipment Maintenance and Materials Storage
- ◆ GPM-11: Material Disposal
- ◆ GPM-12: Fugitive Dust Reduction
- ◆ GPM-13: Trash Removed Daily
- ◆ GPM-14: Project Cleanup after Completion
- ◆ GPM-15: Revegetate Disturbed Areas
- ◆ WQHM-1: Staging Areas and Stockpiling of Equipment
- ◆ WQHM-2: Storm Water Pollution Prevention Plan
- ◆ WQHM-4: Hazardous Materials Management and Spill Response Plan
- ◆ WQHM-5: In-Water Concrete Use
- ◆ WQHM-6: Accidental Discharge of Hazardous Materials
- ◆ IWW-1: Appropriate In-Water Materials
- ◆ IWW-2: In-Water Vehicle Selection and Work Access
- ◆ IWW-3: In-Water Placement of Materials, Structures, and Operation of Equipment
- ◆ IWW-5: Cofferdam Construction
- ◆ IWW-6: Dewater/Diversion Restrictions
- ◆ IWW-8: Removal of Diversion and Barriers to Flow
- ◆ IWW-13: Dredging Operations and Dredging Materials Reuse Plan
- ◆ VHDR-1: Avoidance of Vegetation Disturbance
- ◆ VHDR-2: Native and Invasive Vegetation Removal Materials and Methods
- ◆ VHDR-3: Revegetation Materials and Methods
- ◆ VHDR-4: Revegetation Erosion Control Materials and Methods
- ◆ VHDR-6: General Herbicide Use

Mitigation Measure NOISE-2: Minimize Operations and Maintenance Noise Conflicts

Implementation of these general protection measures and Mitigation Measures REC-1 and NOISE-2 would reduce impacts to recreational resources to a **less-than-significant** level.

Impact 3.16-3: Implementing future projects permitted under the Order could increase the use of existing recreational resources and facilities such that substantial physical deterioration would occur or be accelerated.

Effects of Project Construction Activities, Constructed Facilities (Natural or Artificial Infrastructure), and Operations and Maintenance of those Facilities

Construction of restoration projects, constructed facilities (natural or artificial infrastructure), and operations and maintenance of those facilities permitted under the Order could temporarily or permanently impede recreational use, as discussed in Impact 3.16-1, causing recreational users to be displaced to other resources or facilities. For example, many levees have trails, and modifying or removing levees as part of levee setbacks would require closing those trails during construction. As another example, establishing, restoring, or enhancing stream, riparian, or tidal habitats may require permanently relocating or decommissioning existing trails or roads. Recreationists who use the trails and/or roads would need to use other facilities while the trails/and or roads are closed. This displacement may increase the use of other

existing recreational resources or facilities, potentially leading to substantial physical deterioration.

Many construction-related impacts may be temporary; however, it is reasonable to expect that some impacts may be long-term and some may be long-term and permanent. Alternatively, scenarios including improved or setback levees, restoring upslope watershed areas, floodplain restoration, and multi-benefit restoration projects could result in new public access or recreation facilities such trails.

In addition, restoration projects such as establishing, restoring, and enhancing tidal, subtidal, and freshwater wetlands could support native marsh plants; provide habitat elements for targeted species; provide other targeted wetland functions; and provide hydrologic variability for fish and other aquatic species. These features would result in increased primary and secondary production and diversification and increased aquatic habitat for a diversity of fish and wildlife species, which would allow for wildlife-oriented recreation such as recreational experiences in the restored areas, hunting, and fishing. This could result in increased recreation resources, which could decrease the use of other existing recreational resources, which would be beneficial. Also, fish passage improvement projects (e.g., dam removal) could improve recreation (e.g., allow for boating or kayaking that was previously impassable).

The specific locations and scale of possible future permitted restoration projects are not yet known. Therefore, the potential for displacement that would accelerate physical deterioration at existing recreational facilities in the study area cannot be determined at this time. The factors necessary to identify individual restoration projects impacts include the size and characteristics of a project; the duration of construction; and the types and precise locations of construction activities, the facility or resource itself, and alternative recreational opportunities. Because adverse changes to recreation resources could result from the construction and operation of restoration projects permitted under the General Order, this impact would be **potentially significant**. The Order does not include any general protection measures applicable to this impact.

As part of the State Water Board or Regional Board's issuance of a NOA for a restoration project under the General Order, compliance with Mitigation Measure REC-2 would be required when applicable to a given project. Implementation of this mitigation measure would be the responsibility of the project proponent(s) under the jurisdiction of the State Water Board, appropriate Regional Board, or other authorizing regulatory agency.

Mitigation Measure REC-2: Minimize Impacts on Existing Recreational Resources

If a restoration project results in substantial temporary or permanent impairment, degradation, or elimination of recreational facilities that causes users to be directed toward other existing facilities, the project proponent shall coordinate with affected public and private recreation providers to direct the displaced users to underused recreational facilities.

The project proponent shall conduct additional operations and maintenance work at existing facilities to prevent them from deteriorating. If possible, temporary

replacement facilities shall be provided. If the increase in use is temporary, once use levels have decreased back to existing conditions, the degraded facilities shall be rehabilitated or restored.

Where impacts on existing facilities are unavoidable, the project proponent shall compensate for impacts through mitigation, restoration, or preservation off-site or creation of additional permanent new replacement facilities.

Implementing Mitigation Measures REC-1 and REC-2 would reduce this impact to a **less-than-significant** level.