

3.2 Aesthetics

3.2.1 Introduction

This section discusses the visual resources in and characteristics of the study area and evaluates the potential impacts of the types of restoration projects that would be permitted under the Order. (See Section 2.6, *Categories of Restoration Projects in the Order.*) As discussed below, potential impacts include a change in a scenic vista, damage to scenic resources, degradation of visual character, and creation of a new source of light or glare.

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

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

3.2.2 Environmental Setting

Visual resources include physical features that make up the visible landscape, including land, water, vegetation, geologic features, and built structures (e.g., buildings, roadways, bridges, levees). This section also addresses visual resources in the surrounding landscape that contribute to the visual character of the study area.

Sensitive Viewers

Viewer sensitivity is one factor in assessing aesthetic impacts. It is a function of several influences:

- ◆ Visibility of the landscape
- ◆ Proximity of viewers to the visual resources
- ◆ Frequency and duration of views
- ◆ Number of viewers
- ◆ Types of individuals and groups of viewers
- ◆ Viewers' expectations, as influenced by their values, awareness, and activity

The viewer's distance from landscape elements plays an important role in determining an area's visual quality. Landscape elements are considered higher or lower in visual importance based on their proximity to the viewer. Generally, the closer a visual resource is to the viewer, the more dominant and thus the more visually important it is to the viewer. To account for this, visual quality assessment methods typically separate landscapes into foreground, middleground, and background views. Generally, the foreground is characterized by clear details (within 0.25 or 0.5 mile from the viewer); the middleground is characterized by the loss of clear texture in a landscape, which creates

a uniform appearance (foreground to 3–5 miles in the distance); and the background extends from the middleground to the limit of human sight (USFS 1974:7).

Residents

Communities in the study area vary in terms of their population, density, and character. Larger cities in the study area include Los Angeles, San Diego, San Jose, San Francisco, Fresno, and Sacramento. Examples of midsized cities include Stockton, Irvine, Fremont, Corona, and Vacaville. Smaller cities include Chico, Redding, Napa, Hollister, and Eureka. Small cities or towns include Isleton, Calistoga, Corning, Truckee, and Yucca Valley. A small portion of the residents of the study area reside in rural communities dispersed throughout the state.

Residents of these communities are potential viewers of visual resources in the study area. Views are among many factors that influence residential location choice. Residents tend to have high visual sensitivity. People who live in the larger cities with higher population densities tend to have views consisting of greater built environments. Residents of smaller cities and towns tend to have more views of waterways and rural views. Other visual resources in the study area include areas with vistas of the Pacific Ocean, waterways, and major mountain ranges. Residents living farther from given visual resources view these resources less frequently, and potentially from greater distances, which can reduce the visual importance of those resources to those people.

Workers and Commuters

Workers and commuters using roadways and railways in the study area are potential viewers of visual resources. Most job opportunities in the rural portions of the study area are related to agriculture. Commuter towns or bedroom communities are residential suburbs inhabited largely by people who commute to a nearby city for work. These workers routinely view the natural environment, built environment, and other aspects of the study area that contribute to its visual character. Commuters using roadways and railways may view these resources for less time, at greater speeds, and from greater distances than residents, workers, visitors to recreational areas, and other sensitive viewers. Workers and commuters generally have low visual sensitivity, because their activities tend not to focus on visual surroundings. Larger cities and urban areas of the study area contains less agricultural land and more built-out urban land.

Recreation Visitors, Travelers, and Tourists

The study area features diverse recreational opportunities that derive from varied resources and facilities. Outdoor recreation varies based on the landscape and surrounding resources. For instance, activities such as boating, fishing, and swimming could occur in lakes, reservoirs, beaches, and rivers, and land-based activities such as hiking, biking, and camping could occur in areas not directly connected with waterways. In public areas—national, state, and local parks and National Forest lands—the visual character tends to be of high quality, particularly where the parks provide access to scenic destinations such as smooth rolling hills, patterns of mountaintop and tree-lined skylines, prominent ridgelines, sharp rocky outcroppings, dense and dark forests, and visually captivating waterfalls. Recreation in urban areas could include activities such as

the use of city parks, walkways, and museums, events, tourist destinations, and picnicking. The study area contains a wide variety of recreation resources and opportunities because of its size and range of landscapes and water features.

Working Landscapes

Working landscapes are lands on which resource management and/or cultivation activities occur in large areas, mostly without buildings or structures, such as agricultural, timber, or grazing lands. Working landscapes may contain natural contours, waterways, and other features or may alter these while maintaining a primarily unbuilt visual context. A variety of features may define the visual character of a working landscape. The preservation, transformation, and general purpose or function of prominent features that are most noticeable in the landscape can affect the human perception of a working landscape. Working landscapes in the study area are generally associated with agricultural and timber production. Facilities may include renewable and energy facilities, such as wind turbines.

The agricultural landscape, consisting of orchards, row crops, and pasturelands, is dominant aesthetically and defines rural areas of the study area, most notably the Central Valley. Orchards and row crops are found on large plots and consist of long, horizontal lines that dominate the visual field, creating a uniform form and texture.

Urban Environments

The larger cities and more urban environments include cities such as Los Angeles, San Diego, San Jose, Fresno, and Sacramento. These urban areas contain large built environments and proportionally less natural habitat or open space. The scenic qualities of these urban areas are lower than those of more rural areas because the existing built environment detracts from views of the natural landscape.

Region Descriptions

Regional Board Region 1—North Coast

The North Coast Region encompasses approximately 19,400 square miles, and includes 340 miles of coastline and remote wilderness areas, as well as urbanized and agricultural areas. The North Coast Region covers all of Del Norte, Humboldt, Trinity, and Mendocino Counties; major portions of Siskiyou and Sonoma Counties; and small portions of Glenn, Lake, Modoc, and Marin Counties. Scenic highways in the North Coast Region include State Routes (SRs) 12 and 116 and U.S. Highway (U.S.) 101.

Regional Board Region 2—San Francisco Bay

The San Francisco Bay Region is 4,603 square miles, roughly the size of the state of Connecticut, and is characterized by its dominant feature, 1,100 square miles of the 1,600-square-mile San Francisco Bay estuary, the largest estuary on the West Coast of the United States, where freshwater from California's Central Valley mixes with the saline waters of the Pacific Ocean.

The San Francisco Bay estuary conveys the waters of the Sacramento and San Joaquin Rivers into the Pacific Ocean. The bay marks the natural topographic

separation between the northern and southern coastal mountain ranges. The San Francisco Bay Region's waterways, wetlands, and bays form the centerpiece of the United States' fourth-largest metropolitan region, including all or major portions of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties. The region also includes coastal portions of Marin and San Mateo Counties, from Tomales Bay in the north to Pescadero and Butano Creeks in the south. Scenic highways in the San Francisco Bay Region include SRs 9, 24, 35, and 84, and Interstates 280, 580, and 680, as well as the iconic coastal SR 1 and U.S. 101.

Regional Board Region 3—Central Coast

The Central Coast Regional Board has jurisdiction over a 300-mile-long by 40-mile-wide section of the state's central coast. Its geographic area encompasses all of Santa Cruz, San Benito, Monterey, San Luis Obispo, and Santa Barbara Counties as well as the southern third of Santa Clara County, and small portions of San Mateo, Kern, and Ventura Counties. Included in the region are urban areas such as the Monterey Peninsula and the Santa Barbara coastal plain; prime agricultural lands as the Salinas, Santa Maria, and Lompoc Valleys; National Forest lands; extremely wet areas like the Santa Cruz Mountains; and arid areas like the Carrizo Plain. Scenic highways in the Central Coast Region include SRs 1, 33, 68, and 156 and U.S. 101.

Regional Board Region 4—Los Angeles

The Los Angeles Region encompasses all coastal watersheds and drainages flowing to the Pacific Ocean between Rincon Point (on the coast of western Ventura County) and the eastern Los Angeles County line, as well as the drainages of five coastal islands: Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente. In addition, the Los Angeles Region includes all coastal waters within 3 nautical miles off the continental and island coastlines. Major mountain ranges in the Los Angeles Region include the San Gabriel Mountains, Santa Monica Mountains, Santa Susana Mountains, Simi Hills, and Santa Ynez Mountains. The San Gabriel Mountains are the most prominent range in this group.

Land uses in the region vary considerably. In Ventura County, land uses are changing from agriculture and open space to urban residential and commercial. In southern Los Angeles County, predominant land uses include urban residential, commercial, and industrial. In northern Los Angeles County, open space is rapidly being transformed into residential communities.

Regional Board Region 5—Central Valley

The Central Valley Region is bounded by the crests of the Sierra Nevada on the east and the Coast Ranges and Klamath Mountains on the west. This region extends some 400 miles from the California/Oregon border southward to the headwaters of the San Joaquin River. The Sacramento River and San Joaquin River Basins cover about one-fourth of the total area of California and more than 30 percent of the state's irrigable land. The Sacramento–San Joaquin Delta is a maze of river channels and diked islands covering roughly 1,150 square miles,

including 78 square miles of water area. Scenic highways in the Central Valley Region include Interstate 5, U.S. 50, and SRs 4, 20, 33, 88, 89, 151, 152, and 180.

Regional Board Region 6—Lahontan

The Lahontan Region has historically been divided into the North and South Lahontan Basins at the boundary between the Mono Lake and East Walker River watersheds. The region is about 570 miles long and has a total area of 39,210 square miles. The Lahontan Region includes the highest point (Mount Whitney) and lowest point (Death Valley) in the contiguous United States, and the topography of the remainder of the region is diverse. The region includes the eastern slopes of the Warner Mountains and the Sierra Nevada; the northern slopes of the San Bernardino and San Gabriel Mountains; the southern slopes of the Tehachapi Mountains; and all or part of other ranges including the White, Providence, and Granite Mountains and the western slopes of the New York and Ivanpah Mountains. Topographic depressions include the Madeline Plains and the Surprise, Honey Lake, Bridgeport, Owens, Antelope, and Victor Valleys.

Much of the Lahontan Region is in public ownership, with land use controlled by agencies such as the U.S. Forest Service (USFS), National Park Service, and U.S. Bureau of Land Management; various branches of the military; the California Department of Parks and Recreation; and the City of Los Angeles Department of Water and Power.

While the permanent resident population of the Lahontan Region (about 800,000 in 1995) is lower than that of more urbanized regions, it is mostly concentrated in high-density communities in the South Lahontan Basin. In addition, millions of visitors use the Lahontan Region for recreation each year. Scenic highways in the Lahontan Region include SRs 89, 168, and 190, and U.S. 395.

Regional Board Region 7—Colorado River Basin

The Colorado River Basin Region covers approximately 13 million acres (20,000 square miles) in southeastern California. It includes all of Imperial County and portions of San Bernardino, Riverside, and San Diego Counties. The region is bounded for 40 miles on the northeast by the state of Nevada; on the north by the New York, Providence, Granite, Old Dad, Bristol, Rodman, and Ord Mountain ranges; on the west by the San Bernardino, San Jacinto, and Laguna Mountain ranges; on the south by Mexico; and on the east by the Colorado River and state of Arizona.

A significant geographical feature of the Colorado River Region is the Salton Trough, which contains the Salton Sea and the Coachella and Imperial Valleys. Much of the region's agricultural economy and industry is located in the Salton Trough. Scenic highways in the Colorado River Region include SRs 62 and 74.

Regional Board Region 8—Santa Ana

The Santa Ana Region is the smallest of the nine regions in the state (2,800 square miles) and is located in Southern California, roughly between Los Angeles and San Diego. Although the region is small, its four million residents (1993 estimate) make

the Santa Ana Region one of the most densely populated regions. Scenic highways in the Santa Ana Region include SRs 38, 91, and 243.

Regional Board Region 9—San Diego

The San Diego Region forms the southwest corner of California and occupies approximately 3,900 square miles of surface area. The San Diego Region encompasses most of San Diego County, parts of southwestern Riverside County, and southwestern Orange County. The western boundary of the region consists of the Pacific Ocean coastline, which extends approximately 85 miles north from the United States/Mexico border. The northern boundary of the San Diego Region is formed by the hydrologic divide that starts near Laguna Beach and extends inland through El Toro and easterly along the ridge of the Elsinore Mountains into the Cleveland National Forest. The eastern boundary of the region is formed by the Laguna Mountains and other lesser-known mountains located in the Cleveland National Forest. The region's southern boundary is formed by the United States/Mexico border. Scenic highways in the San Diego Region include SRs 52, 75, 78, 125, and 163.

Light and Glare

For the purposes of the analysis in this PEIR, *light* refers to unnatural nighttime lighting, which may intrude into sky darkness when added to an area that currently contains little or no artificial lighting (also known as “light pollution”). *Glare* refers to unnatural light or reflected natural light that can be annoying or distracting.

Lighting and glare levels tend to be much lower in undeveloped areas, particularly when these areas occur farther from developed areas. Urban areas contain varied light sources, such as streetlights and car headlights, and in more urbanized areas, skyglow may be present. (Skyglow is an areawide illumination of the night sky from human-made light sources.)

3.2.3 Regulatory Setting

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

Future permitted restoration projects that would be implemented under the 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

Coastal Zone Management Act

The California Coastal Management Program, approved by the National Oceanic and Atmospheric Administration in 1978, is administered by three state agencies: the California Coastal Commission, the San Francisco Bay Conservation and Development Commission, and the California Coastal Conservancy. The California Coastal Commission manages development along the California coast except San Francisco Bay, where the San Francisco Bay Conservation and Development Commission

oversees development. The California Coastal Conservancy purchases, protects, restores, and enhances coastal resources, and provides access to the shore.

Sierra Resource Management Plan

In 2008, the U.S. Bureau of Land Management approved the Sierra Resource Management Plan, which outlines a management strategy for 2,035 acres of the Cosumnes River Preserve. The plan, prepared to comply with the Federal Land Policy and Management Act, identifies goals, objectives, and management actions addressing 19 resource areas, including visual resources. The visual resources goal is to “protect and enhance the scenic qualities and visual integrity of the characteristic landscapes in the planning area.” The plan designates the Cosumnes River Preserve as an Area of Critical Environmental Concern, requiring special management to protect important natural or cultural resource values (BLM 2008).

U.S. Forest Service Scenery Management System

USFS’s Scenery Management System provides a framework for the inventory, analysis, and management of scenery on National Forest lands. The Scenery Management System includes landscape character descriptions and scenic integrity objectives that can be used to help assess the compatibility of a proposed project with the surrounding landscape. The Scenery Management System is described in detail in USFS’s 1996 handbook, *Landscape Aesthetics: A Handbook for Scenery Management*.

Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act of 1968, as amended (Public Law 90-542; U.S. Code Title 16, Sections 12371–1287), established the National Wild and Scenic Rivers System. The system identifies distinguished rivers of the nation that possess remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. The Wild and Scenic Rivers Act preserves the free-flowing condition of rivers that are designated and protects their local environments. Section 5(d)(1) of the act requires that all federal agencies, when planning for the use and development of water and related land resources, consider potential national wild, scenic, and recreational river areas, which are defined as follows (National Wild and Scenic Rivers System 2020):

- ◆ **“Wild” river areas**—Those rivers or sections of rivers that are free of impoundments and are generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
- ◆ **“Scenic” river areas**—Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
- ◆ **“Recreational” river areas**—Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past. Scenic qualities are a major consideration in the designation of rivers as

wild (pristine), scenic (largely undeveloped), or recreational (mostly developed), although river segments in any of the three categories typically maintain high scenic qualities.

Lake Tahoe Regional Plan

The Tahoe Regional Planning Agency (TRPA) implements its authority to regulate growth and development in the Lake Tahoe Region through the Lake Tahoe Regional Plan, which was updated in 2012. The Lake Tahoe Regional Plan includes Resolution 82-11, the Environmental Threshold Carrying Capacities (threshold standards), Goals and Policies, Code of Ordinances, Area Plans, Community Plans, Plan Area Statements, the Scenic Quality Improvement Plan/Environmental Improvement Program, and other guidance documents. Chapter 36, “Design Standards,” and Chapter 66, “Scenic Quality,” of the TRPA Code contain standards pertaining to scenic quality. These chapters establish a process for analyzing the impacts of a project on scenic quality and define the circumstances that require preparation of a scenic assessment and/or other documents.

Visual Resource Management

The Bureau of Land Management (BLM) is responsible for managing public land for multiple uses, including protection of scenic values within public lands through Visual Resource Management (VRM) in accordance with Section 102(a)(8) of the Federal Land Policy and Management Act of 1976 (FLPMA). Visual resource classes are assigned through the inventory processes and serve two purposes: (1) an inventory tool that portrays the relative value of the visual resources and (2) a management tool that portrays the visual management objects (BLM 2020).

The VRM has four classes (I, II, III, and IV). These classes are assigned through resource management plans (RMPs) and are ultimately based on the management decisions made in RMPs. These classes also include the level of visual change in the landscape character that would be allowed as a result of the proposed management activities and are described below:

- ◆ **VRM I Objective:** The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristics should be very low and must not attract attention.
- ◆ **VRM II Objective:** The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.
- ◆ **VRM III Objective:** The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic

elements found in the predominant natural features of the characteristic landscape.

- ◆ **VRM IV Objective:** The objective of this class is to provide for management activities which require major modifications of the existing character of the landscape. The level of change to the characteristics landscape can be high. These management activities should be made to minimize the impacts of these activities through careful location, minimal disturbance, and repeating the basic elements.
- ◆ **Rehabilitation Areas:** Areas defined by VRM that are in need of rehabilitation from a visual standpoint and should be flagged during the inventory process. The level of rehabilitation will be determined through the RMP proves by assigning the VRM class approved for that particular area.

State

California State Scenic Highway Program

The California Department of Transportation manages the California Scenic Highway Program to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to the highways. Designation as a scenic highway is determined by views of the natural landscape, scenic quality, and the extent of visual intrusion. A city or county must nominate an eligible scenic highway for official designation and adopt a corridor protection program that includes zoning and planning policies to preserve its scenic quality. These policies are discussed below in the context of county and city general plans.

California Coastal Act

Section 30251 of the California Coastal Act sets forth the act's aesthetic requirements. Under Section 30251, the development process must consider and protect the scenic qualities of coastal areas. Permitted development must be located and designed to protect the scenic and visual qualities of coastal areas. This includes protecting views to and along the ocean and scenic coastal areas, matching the visual character of surrounding areas, and where feasible, restoring and enhancing visual quality in visually degraded areas.

Under the California Coastal Act, cities and counties within the Coastal Zone must develop local coastal plans, which, at a minimum, must be as protective as and otherwise consistent with the Coastal Act's standards. Portions of the treatable landscape lie within the Coastal Zone, and treatment activities in these areas may be subject to requirements of the California Coastal Act or local coastal plan.

Regional and Local

The study area encompasses multiple counties with multiple cities throughout California. Each county and city has local regulations and a general plan containing aesthetics goals and policies that promote preservation and enhancement of the area's visual character and areas of identified high scenic value: its natural features, view

corridors, scenic routes, and/or prominent ridgelines considered “gateway” sections of scenic routes that may serve as entrances to a county or city.

3.2.4 Impacts and Mitigation Measures

Methods of Analysis

Aesthetic 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 existing visual resources. However, the precise locations and detailed characteristics of potential future individual restoration projects are yet to be determined. Therefore, this visual analysis focuses on reasonably 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. In determining the extent and implications of potential visual changes, consideration has been given to the following:

- ◆ Potential changes in the visual composition, character, and specifically valued qualities of the affected environment
- ◆ The visual context of the affected environment
- ◆ The extent to which the affected environment contains places or features that have been designated in plans and policies for protection or special consideration
- ◆ The number of viewers, their activities, and the extent to which these activities are related to the aesthetic qualities affected by project changes
- ◆ Viewer sensitivity, which is based on the visibility of the landscape, proximity of viewers, frequency and duration of views, number and types of viewers, and viewers’ expectations as influenced by their activity (e.g., driving, boating, hiking)

Permanent impacts are considered those that would continue through the life of a project as a result of the environmental conditions caused by restoration projects permitted under the Order (e.g., new infrastructure such as fish screens that would be visible and used indefinitely in a specific location). Temporary impacts are considered those that would be temporary in nature (e.g., construction-related activities).

The approach to assessing visual 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 visual resources is considered significant if the types of projects that would be permitted under the Order would do any of the following:

- ◆ Have a substantial adverse effect on a scenic vista
- ◆ Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway
- ◆ Substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point), or, if the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality
- ◆ Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area

Impacts and Mitigation Measures

Table 3.2-1 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 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 3.2-1
Summary of Impact Conclusions—Aesthetics**

Impact Statement	Construction Activities	Constructed Facilities and Operations and Maintenance
3.2-1: Implementing future restoration projects permitted under the Order could result in substantial degradation of visual qualities.	LTS	LTS
3.2-2: Implementing future restoration projects permitted under the Order could result in substantial adverse effects on scenic vistas and scenic resources.	LTS	LTS
3.2-3: Implementing future restoration projects permitted under the Order could result in new sources of substantial light or glare.	LTSM	LTS

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

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

Impact 3.2-1: Implementing future restoration projects permitted under the Order could result in substantial degradation of visual qualities.

Effects of Project Construction Activities

Restoration projects permitted under the Order (e.g., culverts, bridges, fish screens, ladders, or pilings; removal of dams, tide gates, flood gates, or legacy structures; placement of bioengineered stabilization materials; grading and excavation to reconnect, set back, or breach levees; reconnection of stream and river channels; creation of depressions, berms, and drainage features; installation of cofferdams during construction) could include the following construction activities:

- ◆ Mobilization of equipment and materials
- ◆ Preparation of staging areas
- ◆ Installation of temporary construction offices
- ◆ Staging and storage of equipment and materials
- ◆ Vehicle parking
- ◆ Use of designated access and haul routes
- ◆ Clearing of vegetation and structures
- ◆ Preparation of borrow sites
- ◆ Site restoration and site demobilization
- ◆ Removal of excess materials

Projects could also require forming and pouring of concrete, pile driving, excavation, installation of fish bypass pipes or fish screens, dam removal using hand tools or jackhammers and explosives, chemical or manual removal of vegetation, plowing or disking, and wood loading activities. For example, stream crossing, culvert, and bridge projects generally involve removing, replacing, modifying, retrofitting, installing, or resetting the existing culverts, fords, bridges, and other stream crossings and water control structures. Constructing and installing such infrastructure may include excavating the site, forming and pouring a concrete foundation and walls/abutments, and installing the crossing structure.

Construction sites could be visible from nearby waterways, roads, cities, residences, and recreational areas where viewer sensitivity is elevated and visual quality is moderate to high. Views of construction sites and activities could temporarily and adversely affect the visual qualities and character of the surrounding landscape. In addition, the time to construct restoration projects could be as short as a few days, in the case of minor projects, to as long as several years for major projects (e.g., restoration projects requiring construction during certain months of the year).

Therefore, construction activities for restoration projects permitted under the Order could cause temporary changes in local visual conditions. Views could include excavation, grading, vegetation removal, construction equipment, parking vehicles, and temporary construction offices. These elements would be removed after construction; therefore, their presence would not cause permanent changes to local visual conditions. This impact would be **less than significant**.

Projects implementing applicable general protection measures (see Appendix E) included in the Order would further reduce impacts to visual resources. The following general protection measures may apply to visual resources:

- ◆ GPM-11: Material Disposal
- ◆ GPM-14: Project Cleanup after Completion
- ◆ GPM-15: Revegetate Disturbed Areas
- ◆ VHDR-1: Avoidance of Vegetation Disturbance
- ◆ VHDR-3: Revegetation Materials and Methods
- ◆ VHDR-4: Revegetation Erosion Control Materials and Methods
- ◆ VHDR-5: Revegetation Monitoring and Reporting

Implementing these general protection measures would further reduce the less-than-significant impact of project construction on the visual qualities of the study area.

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

Restoration projects permitted under the Order are expected to be beneficial; they would restore the natural character of disturbed sites and result in an increase in aquatic or riparian resource areas and habitat that would attract fish and wildlife. For example, projects to remove small dams, tide gates, flood gates, and legacy structures are designed to reconnect stream corridors, floodplains, and estuaries; establish wetlands; improve passage by aquatic organisms; and restore more natural channel and flow conditions. They also restore fisheries access to historic habitat for spawning and rearing, and improve the long-term quality of aquatic habitat and stream geomorphology. Removing legacy structures and returning these sites to natural habitat would improve visual quality.

Construction of restoration projects could permanently alter the existing visual landscape. New setback levees could slightly extend the existing levee footprint on the landside, which could increase the amount of riparian habitat on the waterside of the existing levee. This type of improvement would not typically result in a substantial long-term or permanent change to visual quality; it would modify the existing infrastructure only slightly and would not add new elements to the landscape.

Restoration projects associated with streambank alterations (e.g., streambank restoration, stabilizing bank with vegetation cover, change in bank structure, planting/ seeding of native plants and trees) could permanently alter the existing visual landscape by increasing the amount of riparian habitat in the surrounding area. These visual changes would be considered beneficial, as they would help increase the establishment of native vegetation communities within the project area. During construction, some restoration projects could temporarily alter the existing visual landscape due to soil exposure and immature vegetation during and after construction. However, it is anticipated that these changes would be temporary until revegetation has been successfully established.

However, some restoration projects could result in the placement of infrastructure such as storage tanks, ponds, culverts, fish screens, fencing, and pumps. Adding a project

feature that prominently contrasts with the existing visual qualities and character of the surrounding landscape could cause a change in visual quality. These facilities may not be of the same visual character as surrounding landscapes. For example, an intake modified with a new fish screen in a river could change the structure, which could detract from the natural setting. However, a new structure (e.g., fish screen) may not be significant because the existing visual character of the project area could already be defined by human-made levees, a highly altered river system, and agricultural lands. Another example is a storage tank or ponds that would alter the visual character of the area by introducing man-made structures into areas that could be visible to nearby residential or recreationalists. The storage tanks or ponds may be screened by existing vegetation; however, in some locations these structures may still alter the visual character.

In conclusion, future restoration projects permitted under the Order could result in the permanent alteration of visual qualities. Many of the long-term effects of these projects on visual qualities are expected to be beneficial or neutral, because the projects would involve habitat restoration that would return the existing sites to more natural characteristics. For example, removing legacy structures and returning these sites to natural habitat would improve visual quality in the study area. Restoration projects permitted under the Order could result in the placement of infrastructure such as storage tanks, ponds, culverts, fish screens, fencing, and pumps. However, while these structures may not be visible from great distances, these projects would likely have relatively localized effects, would cause substantial degradation of visual quality. Therefore, this impact would be **potentially significant**. The Order does not include any general protection measures applicable to this impact.

Projects implementing applicable general protection measures (see Appendix E) included in the Order would further reduce impacts to visual resources. The following general protection measures may apply to visual resources:

- ◆ VHDR-5: Revegetation Monitoring and Reporting

Implementing this general protection measure would reduce the impacts to visual character from constructed restoration facilities, but not to a less-than-significant level. This impact would be **potentially significant**.

As part of the State Water Board or Regional Board's issuance of a NOA for a restoration project under the Order, compliance with Mitigation Measure AES-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 AES-1: Minimize Degradation of Visual Quality

- ◆ Use compatible colors for proposed structural features, such as fish screens and storage tanks. Use earth tone paints and stains with low levels of reflectivity.
- ◆ Minimize the vertical profile of proposed structures as much as possible.

- ◆ Use vegetation plantings on proposed facility walls, such as climbing plants, espaliers, and other forms that soften the appearance of structures.
- ◆ Provide vegetative screening to soften views of structures. Landscaping should complement the surrounding landscape.

Implementing the general protection measure and Mitigation Measure AES-1 would reduce this potentially significant impact to a **less-than-significant** level.

Impact 3.2-2: Implementing future restoration projects permitted under the Order could result in substantial adverse effects on scenic vistas and scenic resources.

Effects of Project Construction Activities

Construction activities for future restoration projects permitted under the Order could result in a temporary adverse effect on an existing scenic vista or scenic resource. Similar to Impact 3.2-1, construction activities such as excavation, grading, and removal of vegetation, as well as the presence of equipment, vehicle parking, and temporary construction offices could result in temporary changes to local visual conditions.

Construction sites could be visible from designated scenic roads and highways. Views from roads and highways are typically broad when seen from an elevated position (e.g., roads on a levee) and are expansive. The visibility of construction activities and associated equipment could temporarily and adversely affect scenic views from scenic vistas and designated scenic roads.

Construction activities for restoration projects permitted under the Order could be visible from designated scenic roads and highways, resulting in significant temporary and long-term or permanent adverse changes to scenic vistas. However, construction elements would be removed after construction; therefore, their presence would not cause permanent changes to local visual conditions. This impact would be **less than significant**.

Projects implementing applicable general protection measures (see Appendix E) included in the proposed Order would further reduce impacts to visual resources. The following general protection measures may apply to visual resources:

- ◆ GPM-11: Material Disposal
- ◆ GPM-14: Project Cleanup after Completion
- ◆ GPM-15: Revegetate Disturbed Areas
- ◆ VHDR-1: Avoidance of Vegetation Disturbance
- ◆ VHDR-3: Revegetation Materials and Methods
- ◆ VHDR-4: Revegetation Erosion Control Materials and Methods
- ◆ VHDR-5: Revegetation Monitoring and Reporting

Implementing these general protection measures would further reduce the less-than-significant impact of project construction on scenic resources.

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

Restoration projects permitted under the Order would not dominate or obstruct views of scenic vistas from any of the designated scenic resources including highways, expressways, routes, or waterways. Restoration projects are expected to be beneficial to visual resources in that they would restore the natural character of disturbed sites and result in an increase in aquatic or riparian resource areas. Some restoration projects could result in the placement of infrastructure such as culverts, fish screens, fencing, ponds and storage tanks, and pumps. Adding a project feature that prominently contrasts with the existing visual qualities and character of the surrounding landscape could cause a substantial change in visual quality. However, for example, the appearance of a constructed setback levee may not be considered significant because it would be similar to the existing landscape and would be visible in the background from many vantage points.

Operations and maintenance (O&M) activities would introduce workers and vehicles into the study area but would be temporary and intermittent.

Many long-term effects on visual quality from restoration projects permitted under the Order are expected to be beneficial or neutral; the projects would involve habitat restoration, which would return the existing sites to more natural characteristics. Restoration projects permitted under the Order would be visible from any of the designated scenic resources including highways, expressways, routes, or waterways. However, they would not result in substantial adverse effects on scenic vistas or scenic resources, given the relatively localized effects, and the visual qualities of the area would not be substantially degraded. Therefore, this impact would be **less than significant**. The Order does not include any general protection measures applicable to this impact.

Impact 3.2-3: Implementing future restoration projects permitted under the Order could result in new sources of substantial light or glare.

Effects of Project Construction Activities

Construction activities for restoration projects permitted under the Order could result in new sources of substantial light or glare. For example, glare could occur if reflective construction materials were positioned in highly visible locations where sunlight could be reflected. However, any glare would be highly transitory and short-term, given the movement of construction equipment and materials in the construction area, and the effect would likely be negligible. In addition, construction activities would typically not occur on surfaces that would be large enough and flat enough to generate substantial glare.

Construction activities could require the use of nighttime flood lighting if work were to extend into the nighttime hours. For example, if the construction schedule were approaching the flood season or a blackout time period for sensitive species, restoration projects may require continuous daytime and nighttime work. These temporary sources of light could be visible to residents, businesses, and other people in the vicinity. They

would be particularly noticeable in rural areas with lower levels of light pollution from existing sources, such as street lights.

Construction activities or the use of construction lighting for restoration projects permitted under the Order could temporarily generate glare. Because these construction activities could result in a substantial adverse effect associated with night lighting and glare in the study area, this impact would be **potentially significant**.

Projects implementing applicable general protection measures (see Appendix E) included in the Order would further reduce impacts to visual resources. The following general protection measures may apply to visual resources:

- ◆ GPM-3: Construction Hours

As part of the State Water Board or Regional Board's issuance of a NOA for a restoration project under the Order, compliance with Mitigation Measure AES-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 AES-2: Avoid Effects of Project Lighting

Proposed lighting facilities shall use shields, and lighting shall be directed downward and inward toward the facilities.

Implementing the general protection measure and Mitigation Measure AES-2 would reduce this potentially significant impact to a **less-than-significant** level.

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

Restoration projects permitted under the Order would not be expected to include new permanent lighting, or buildings or other facilities that would include highly reflective materials. Other ongoing O&M activities would temporarily introduce workers and vehicles to the study area; however, such activities would occur during daylight and would not introduce substantial new sources of light or glare to the area. For example, upslope watershed sites may be restored to reduce the delivery of sediment to streams, promote natural hydrologic processes, and restore habitat for birds, amphibians, fish, and other species. This project type also includes road- and trail-related restoration including decommissioning, upgrading, and storm-proofing of roads and trails. These types of projects do not include materials that would produce glare or nighttime lighting.

Restoration projects permitted under the Order would not be expected to include new permanent lighting, or buildings or other facilities that would include highly reflective materials. Some restoration projects could result in the integration of temporary bioengineered materials that blend in with the natural environment to help reinforce bank stability. For example, bioengineered bank stabilization projects that would be permitted under the Order could include the integration of living woody and herbaceous materials with earthwork and recontouring of streambanks with the placement of organic and inorganic materials (e.g., biodegradable fabric/logs) to increase the stabilization and structure of bank soil. These types of projects do not include materials that would

produce glare or nighttime lighting. Routine O&M activities would introduce workers and vehicles into the study area, but nighttime lighting would not likely be required and no new sources of light and glare would be introduced to the study area. In addition, natural light reflected by constructed restoration projects (e.g., additional water present as a result of a setback levee or increase in floodplain area) is not expected to be annoying or distracting, because water features are considered aesthetically beneficial. This impact would be **less than significant**. The Order does not include any general protection measures applicable to this impact.