

7.3 Aesthetics

This section describes the environmental setting, potential impacts, and mitigation measures for aesthetics impacts that may result from changes in hydrology or changes in water supply. The aesthetic environment or scenic resources are composed of the natural and human-made features of a landscape that characterize its form, line, texture, and color. Activities that substantially alter these characteristics could result in potentially significant impacts on a scenic vista, damage scenic resources visible from a scenic highway, or degrade the existing visual character or quality of a site. Implementation of the proposed Plan amendments is expected to improve water quality conditions over a large geographic area, particularly for fish and wildlife beneficial uses in the Delta. As such, aesthetic resources associated with healthy rivers and a functioning watershed are expected to be improved. Nevertheless, there is the potential for effects on visual resources from changes in hydrology and changes in water supply.

Changes in hydrology would result in changes in water levels at some reservoirs, which could cause altered views (e.g., from highways, trails, or other viewpoints) because of the increased severity or duration of bathtub ring¹ effects. Changes in water supply include reduced water supply to agriculture, which could result in potential conversion of agricultural land, which could have visual impacts if property is developed or neglected. Other water management actions are also evaluated.

Section 7.1, *Introduction, Project Description, and Approach to Environmental Analysis*, describes reasonably foreseeable methods of compliance and response actions, including actions that would require construction. These actions are analyzed for potential environmental effects in Section 7.21, *Habitat Restoration and Other Ecosystem Projects*, and Section 7.22, *New or Modified Facilities*.

7.3.1 Environmental Checklist

I. Aesthetics	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ A line on the stone or other substrate in a reservoir roughly at the high-water point that is visible when water levels recede and expose bare area.

I. Aesthetics	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

7.3.2 Environmental Setting

This section describes the aesthetics setting to inform the impact discussion in this section and in Section 7.21, *Habitat Restoration and Other Ecosystem Projects*, Section 7.22, *New or Modified Facilities*, and Chapter 9, *Proposed Voluntary Agreements*.

7.3.2.1 Sacramento River Watershed and Delta Eastside Tributaries

In addition to their considerable recreational value, the Sacramento, Mokelumne, Cosumnes, and Calaveras Rivers and their tributaries are primary contributors to the aesthetic qualities of the Sacramento River watershed and Delta eastside tributaries regions—placing them among the most visually significant areas in California. Depending on the location, the visual character and quality of rivers in these regions can include intact and vivid views of mountains, foothills, trees, and other topographical features and natural resources, including glaciated peaks, lakes, alpine and subalpine meadows, and canyons. As the rivers leave the foothills and enter the Central Valley, the visual character and quality generally are characterized by less intact and vivid views, and flatter land that contains orchards and agricultural fields. Views are interrupted by development along the rivers, such as commercial and industrial buildings and residential structures.

In addition to rivers, reservoirs and their surrounding environment often provide high visual character and quality, especially reservoirs surrounded by forests and mountains. Reservoirs located on the Sacramento River and its tributaries contribute to the scenic quality of the landscapes in various watersheds. Like the Sacramento River watershed, the Delta eastside tributaries have many recreational and aesthetically appealing areas, including Camanche and Pardee Reservoirs. As shown in Figures 7.3-1a, 7.3-1b, and 7.3-1c, many study area rivers and reservoirs are located in or near national and state parks and forests.

Several tributary streams are federally and state-designated as Wild and Scenic Rivers (Figures 7.3-1a, 7.3-1b, and 7.3-1c). Wild and Scenic Rivers possess extraordinary scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. Within the Wild and Scenic Rivers designations, those rivers classified as *scenic* are dam free and largely undeveloped but still may be accessed by roads in areas (NWSRS n.d.; Pub. Resources Code, § 5093.545 et seq.). Federal and state policies preserve Wild and Scenic Rivers and their immediate environments in a free-flowing condition for the benefit and enjoyment of present and future generations (U.S.C. tit. 16, § 1271 et seq.; Pub. Resources Code, § 5093.50 et seq.).

Figures 7.3-2a and 7.3-2b depict the 5,970 miles of designated or eligible scenic highways in the study area, including the traditional Gold Country area of northern California that traverses the

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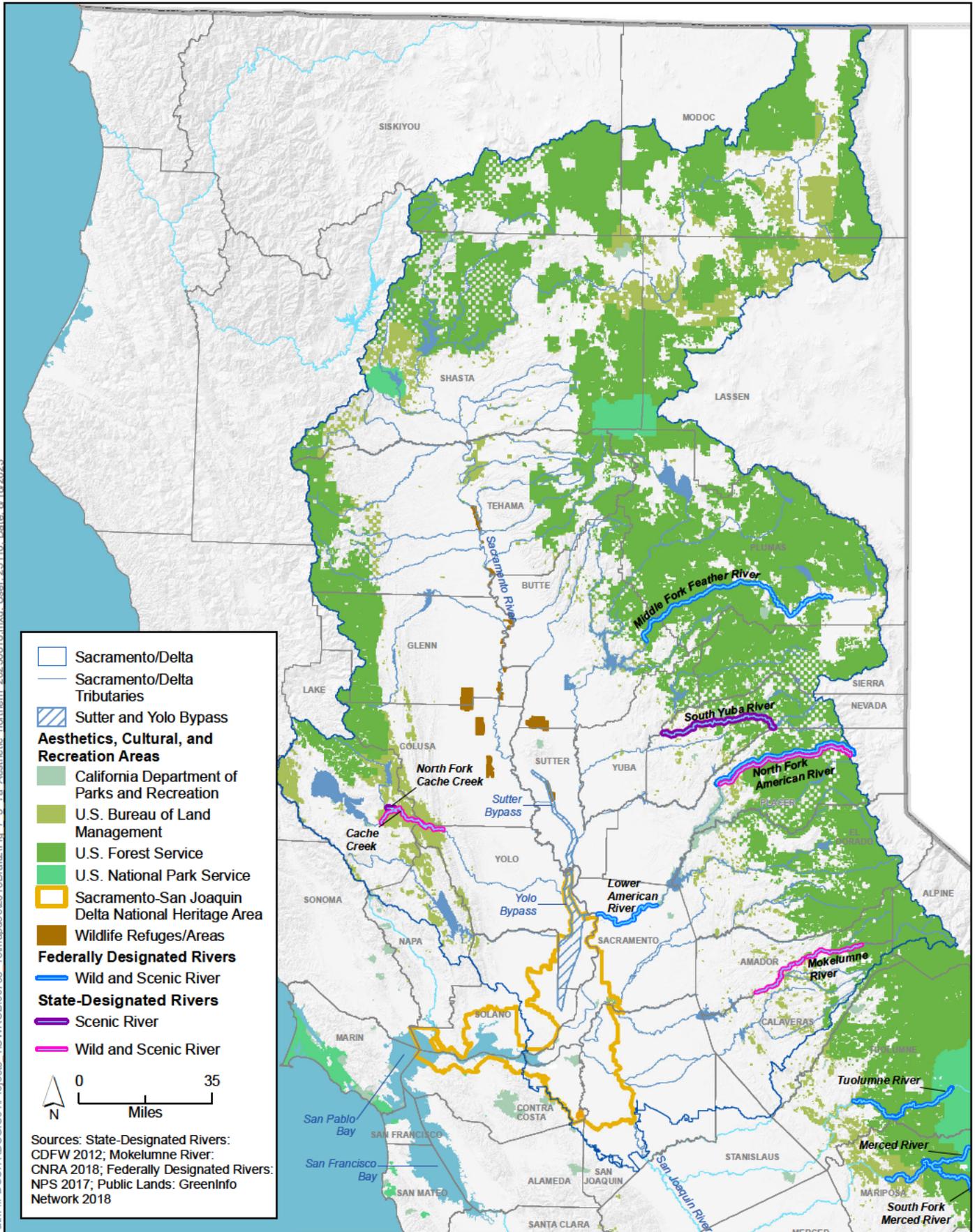
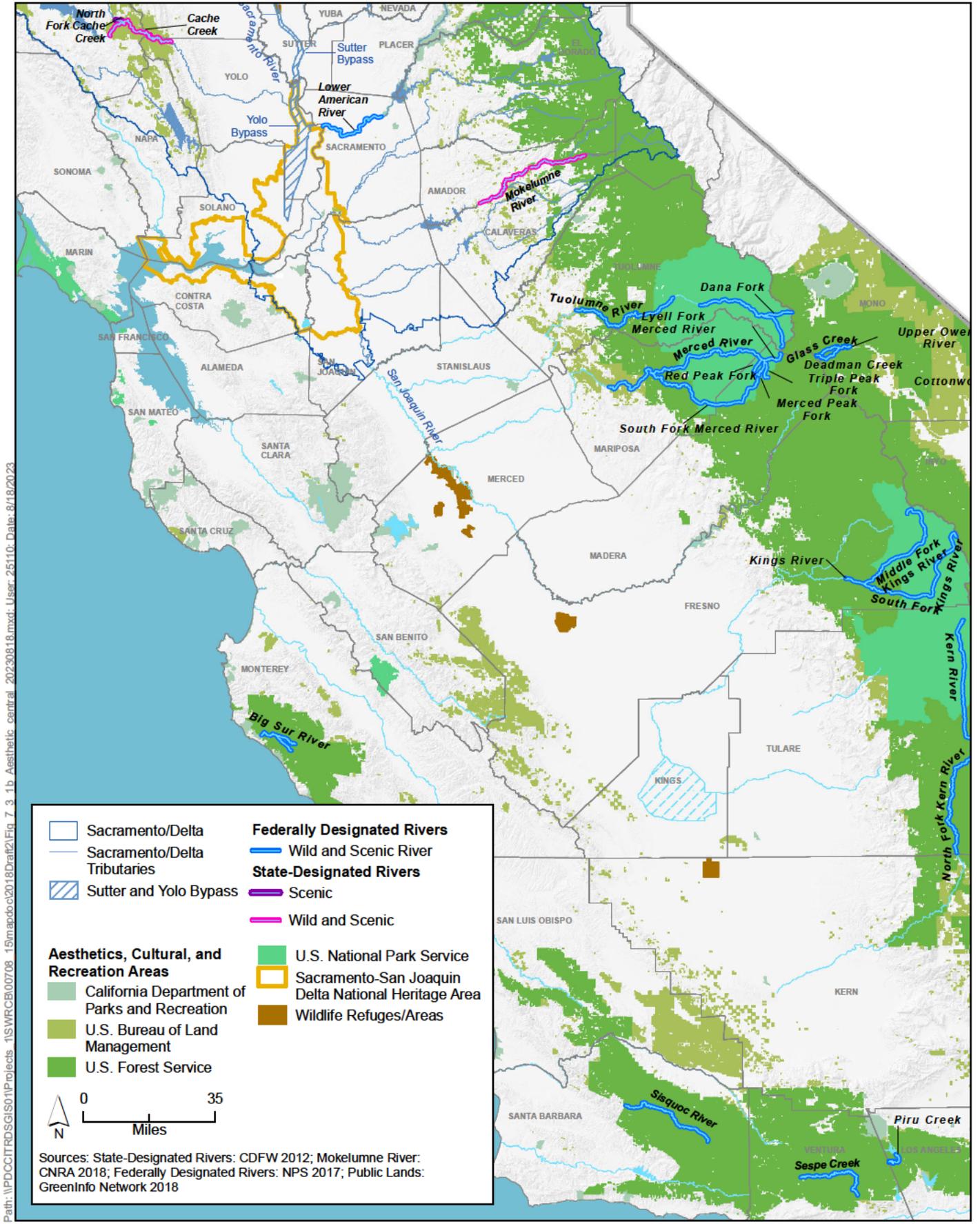


Figure 7.3-1a
Aesthetics, Cultural, and Recreation Areas in the Study Area (northern)



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Figure 7.3-1b
Aesthetics, Cultural, and Recreation Areas in the Study Area (central)

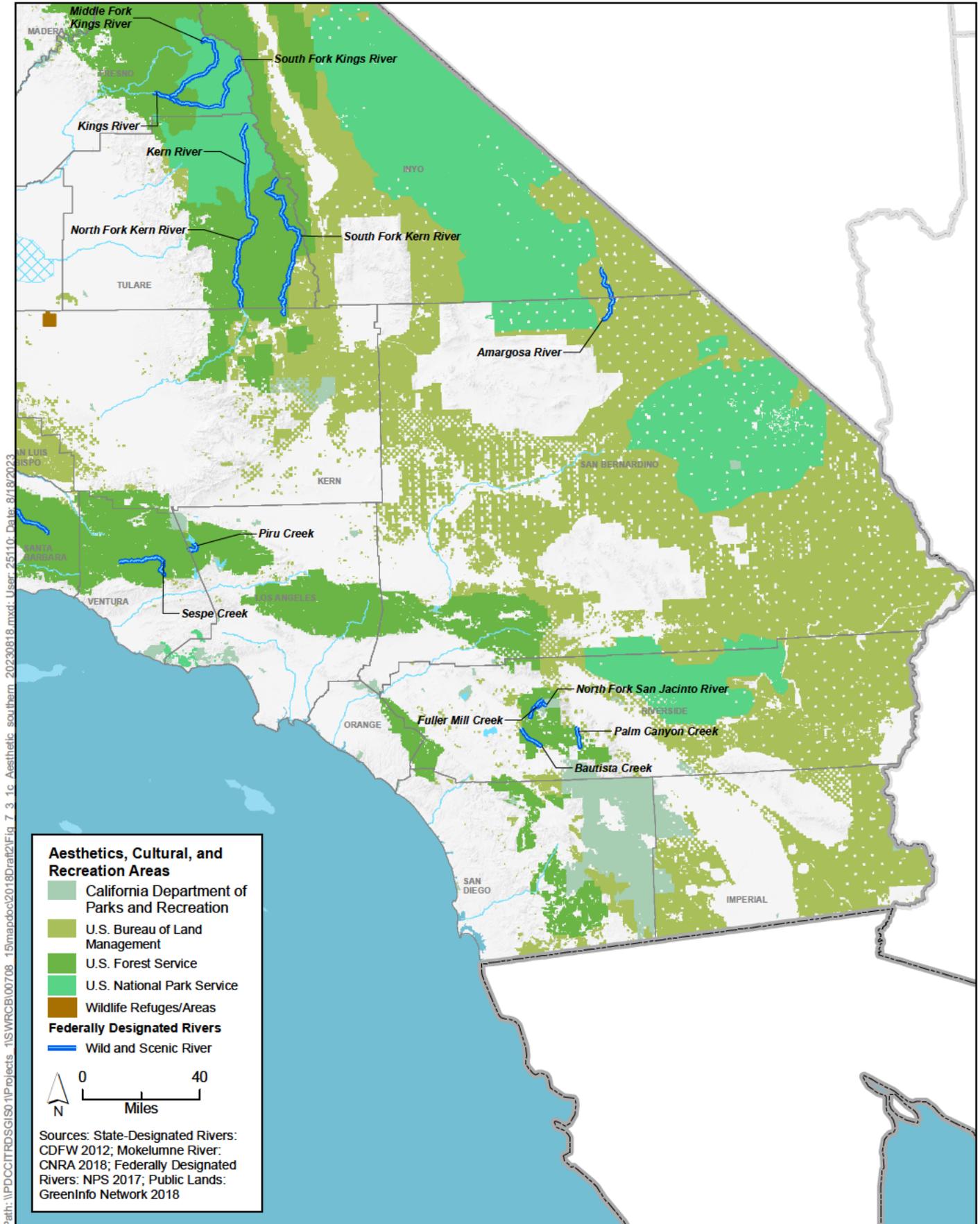


Figure 7.3-1c
Aesthetics, Cultural, and Recreation Areas in the Study Area (southern)

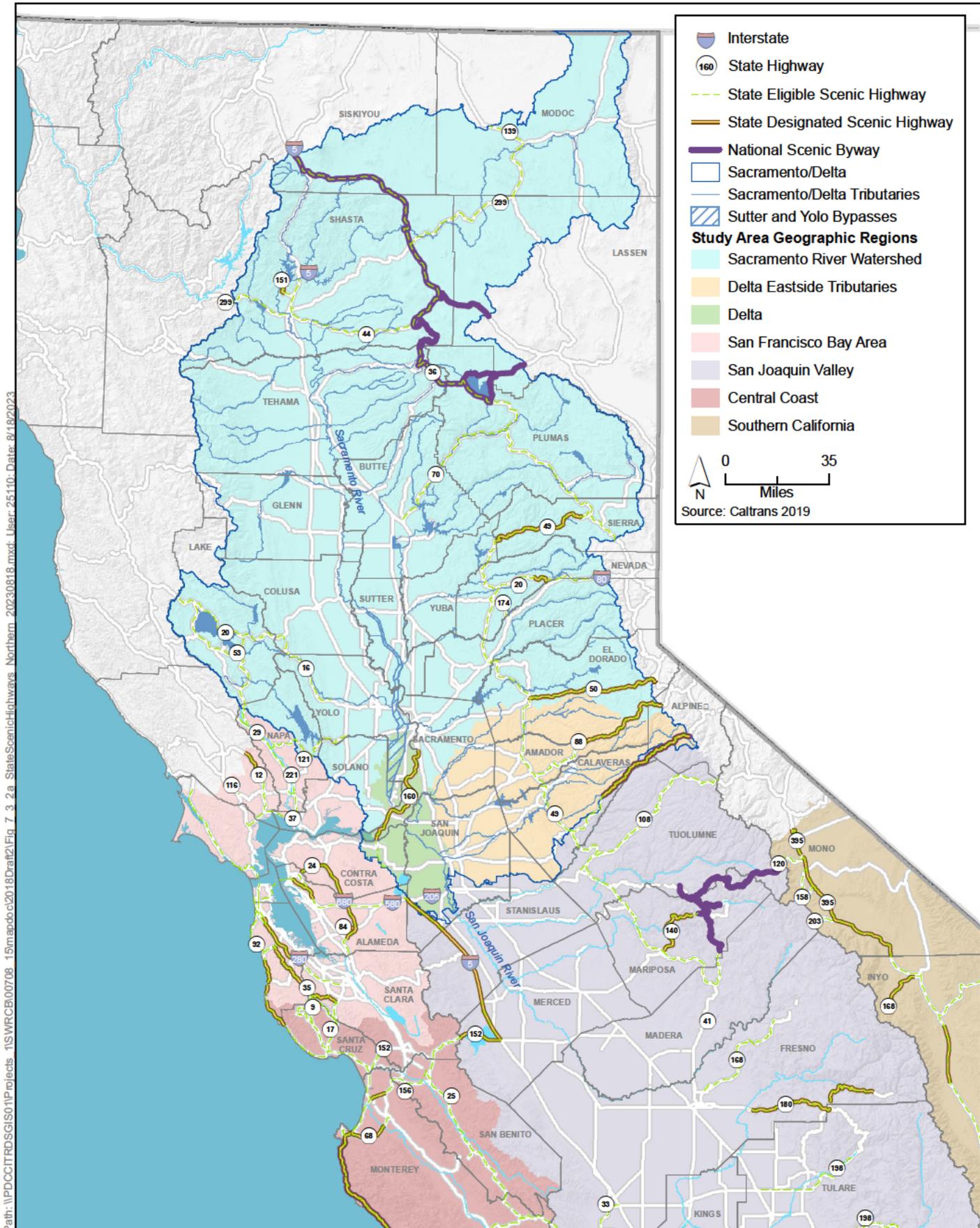


Figure 7.3-2a
State Scenic Highways and National Byways in the Study Area (northern)

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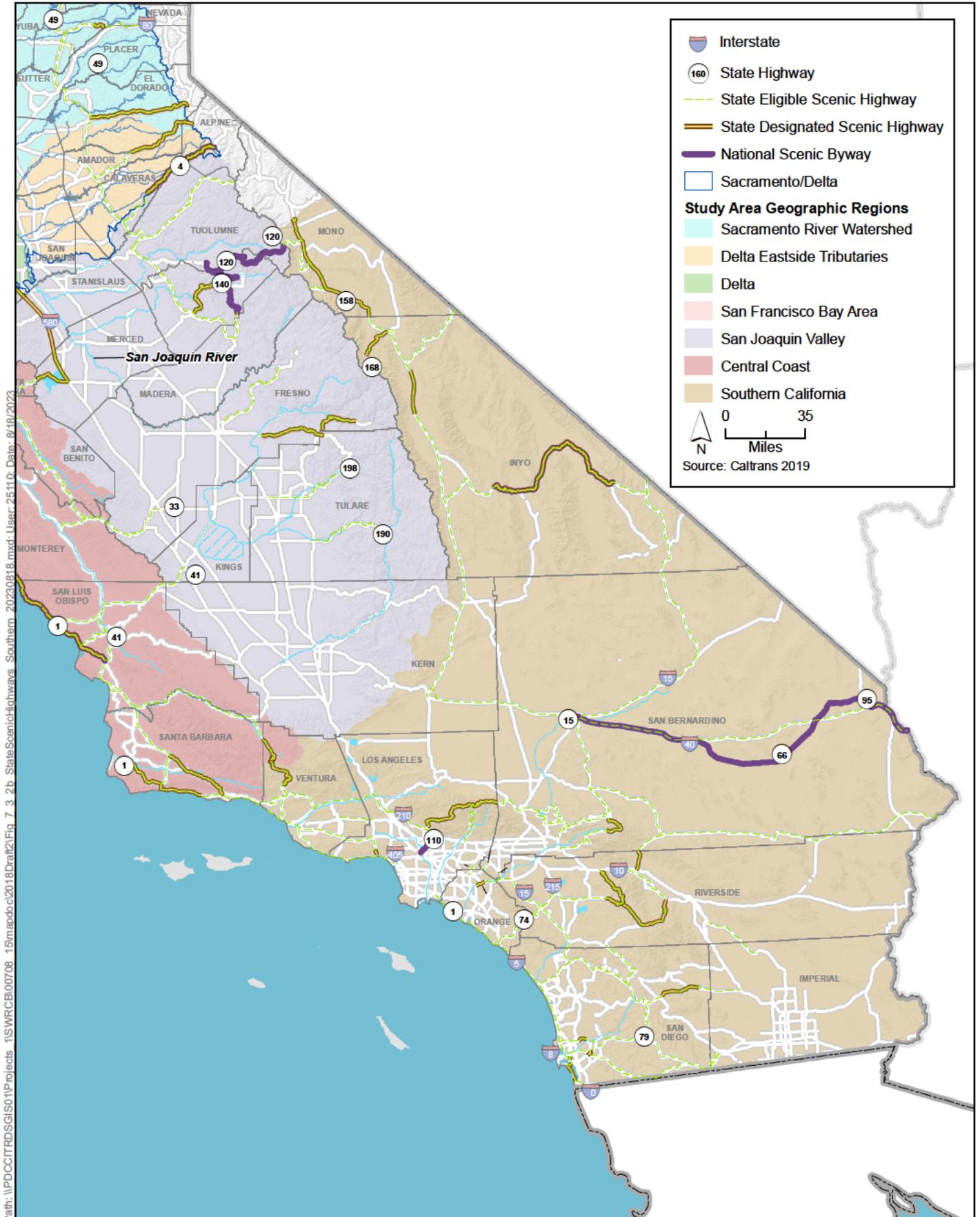


Figure 7.3-2b
State Scenic Highways and National Byways in the Study Area (southern)

foothills in Amador, Calaveras, and El Dorado Counties.² The California Department of Transportation manages the State Scenic Highway Program, which identifies portions of the state highway system and adjacent scenic corridors for special conservation treatment (Caltrans 2008). Over 700 miles of federally recognized national scenic byways also exist in the study area (Figures 7.3-2a and 7.3-2b), including the Volcanic Legacy Scenic Byway through Lassen Volcanic National Park in Shasta, Modoc, Tehama, and Plumas Counties and Ebbetts Pass Scenic Byway in Alpine and Calaveras Counties. The program is part of the U.S. Department of Transportation, Federal Highway Administration. The routes are designated by the U.S. Secretary of Transportation based on various qualities, including scenic characteristics. (FHWA 2023.)³ Many of the scenic highways run alongside the area's waterbodies and many mountain ranges; and they provide residents, commuters, and recreationists with views as they drive.

Waterbodies in several cities in the Sacramento Valley provide these cities and the surrounding area with notable scenery. For example, the Sacramento River runs adjacent to the state's capital, Sacramento, skirting the downtown area and greatly contributing to the city's aesthetic character. The Sacramento River is also a prominent feature in the city of Redding.

Rivers and reservoirs and their associated aesthetic values fluctuate in accordance with hydrology and operational needs. During dry years and drought, the visual landscape can change as reservoir storage and surface elevation levels fall well below the average, showing large exposed and denuded areas that ordinarily would be submerged. Rivers also may flow at much lower levels, exposing more of the streambanks.

Beyond the aesthetic changes to rivers and reservoirs, drier years and drought also affect the views in agricultural areas as some fields are left fallow and others may be converted to less water-intensive crops. When water restrictions limit watering, parks and lawns may be allowed to turn brown.

7.3.2.2 Delta

As described in Section 7.4, *Agriculture and Forest Resources*, the Delta region is recognized as an agricultural and open space region of great value to the state and nation. The Delta also is recognized as a "unique cultural, recreational, [and] natural resource" in the state—all characteristics that help define the region (Pub. Resources Code, § 29702). In 2019, the Delta was established as a National Heritage Area—the first in California—a designation that will further regional efforts to preserve, enhance, and educate the public about its natural and historical resources, including scenic aspects that contribute to recreation and tourism (DPC 2019). The Delta is a destination for fishing, boating, camping, wine tasting, and sightseeing. It is "a place for people, homes and businesses, and a place filled with human history, cultural richness and diversity" (DPC 2018). These characteristics not only help define the "Delta as an evolving place" concept, as identified in the Sacramento-San Joaquin Delta Reform Act of 2009 (Wat. Code, § 85301), but also help establish the unique visual quality and character of much of the Delta.

² A section or corridor of highway becomes eligible for designation as a scenic highway when nominated by a city or county. Once approved by the California Department of Transportation, it is then considered a designated scenic highway (Caltrans 2021).

³ The National Scenic Byways Program, established by Congress in 1991, recognizes historic, scenic, and culturally important roads in the country. The program is part of the U.S. Department of Transportation, Federal Highway Administration. The routes are designated by the U.S. Secretary of Transportation. (FHWA 2023.)

The Delta is much less populated than the greater Sacramento metropolitan area to the east and the San Francisco Bay Area (Bay Area) to the west. Many small towns (including small historic town centers such as Isleton, Walnut Grove, and Courtland) and cities are scattered throughout the region, and suburban centers sit at the edges of the Delta. Much of the land is used for agriculture, and agricultural land can be viewed from many of the region's highways and roads. State Route (SR) 160 is a state-designated scenic highway that follows the Sacramento River as it flows south to converge with the San Joaquin River (Figure 7.3-2a). The Delta landscape is characterized in part by the levees, aqueducts and intake structures, and agricultural fields that sit below the levees and are protected by them. In addition to agriculture, open water, riparian forest, wetlands and aquatic vegetation, and grasslands are found in the Delta. Meandering waterways are a dominant feature of the Delta landscape and establish, in large part, the visual character of the Delta.

7.3.2.3 San Francisco Bay Area

The Bay Area region is highly urban. High-density urban development is the primary use in the area, with some open grassland and forested areas in addition to the open water of the bays. Visitors and residents of the region enjoy views of the bays, bridges, and San Francisco skyline. Each of the different parts of the Bay Area has a distinct aesthetic character.

Solano County is characterized by agriculture, marshland, and oak- and grass-covered hills. In the Fairfield area, which once was primarily agricultural farmland, much of the surrounding area is now a mixture of industrial, commercial, and residential development.

Central and eastern Contra Costa County are typified by grassland hills, agricultural and rural landscapes, and the Delta. The hills provide a backdrop to the agricultural landscape and the Delta, where open views of distant horizons are available and generally are unobstructed by local topography or tall vegetation.

The western portion of Alameda County is primarily urban and includes the cities of Berkeley and Oakland. The eastern portion of the county is more open and is characterized by grass-covered hills and agricultural areas.

The western portion of Santa Clara County is the home of Silicon Valley; the cities of San Jose, Sunnyvale, and Santa Clara, among others, contribute to its urban nature. West of Silicon Valley, the Santa Cruz Mountains are verdant with steep slopes. East of the valley, the Diablo Range is semi-arid. Much of the visual interest in the county is attributable to these two mountain ranges.

Several eligible and designated scenic highways traverse the Bay Area region (Figure 7.3-2a).

7.3.2.4 San Joaquin Valley

The San Joaquin Valley region is predominantly agricultural. Although farmland composes most of the visual landscape, some areas contain dense urban development. In the northwestern part of this region, a sizeable stretch of Interstate 5 is a designated scenic highway. Other designated or eligible scenic highways exist throughout the region, including portions of SR 168 and SR 180 in Fresno County and portions of the national scenic byways—Ebbetts Pass and Tioga Road/Big Oak Flat Road (Figures 7.3-2a and 7.3-2b). The San Joaquin River provides an aesthetic resource for many Central Valley residents, including many tributaries designated as Wild and Scenic that flow through national forests and state and federal parks (Figure 7.3-1b). Reservoirs in the San Joaquin Valley tend to be surrounded by grassland rather than forests and mountains. San Luis Reservoir is a good

example of this landscape. The reservoir is surrounded by open grassland and low hills, with patches of trees and shrubs.

7.3.2.5 Central Coast

The Central Coast region is a large geographic area with highly varying aesthetics, including large urban areas, forested areas of the coastal mountain ranges, agricultural fields, and open range. This region includes parts of Santa Clara, San Luis Obispo, and Santa Barbara Counties. Several designated and eligible portions of scenic highways and national scenic byways run along the coast and through rural agricultural and forested areas of the region (Figures 7.3-2a and 7.3-2b). Federally designated Wild and Scenic Rivers are also near the coast and run through national forests (Figure 7.3-1b). Central Coast region reservoirs tend to be surrounded by grasslands and low hills. Agricultural areas include mixed crop lands and orchards on the outskirts of developed areas, such as Gilroy and Morgan Hill in Santa Clara County, while views of pasture and grazing lands can be seen inland and in foothill regions.

7.3.2.6 Southern California

Large cities in the Southern California region are mostly urban, and the built environment dominates the visual landscape. However, many southern California cities also have notable views of the Pacific Ocean. Wild and Scenic Rivers are associated with state and federal parks of the region (Figure 7.3-1c), and several eligible or designated state scenic highways and national scenic byways exist throughout the region (Figure 7.3-2b). Agricultural areas in southern California are relatively flat and tend to have views of agricultural lands from horizon to horizon, with mountain ranges sometimes distinguishable in the distance.

7.3.3 Impact Analysis

The aesthetic value of an area is a measure of its visual character and quality, combined with the viewer response to the area (FHWA 1988). Scenic quality can best be described as the overall impression that an individual viewer retains after driving through, walking through, or flying over an area (BLM 1980). Viewer response is a combination of viewer exposure and viewer sensitivity. Viewer exposure is a function of the number of viewers, number of views seen, distance of the viewers, and viewing duration. Viewer sensitivity relates to the extent of the public's concern for a particular viewshed. Scenic vistas are areas that have aesthetic value to the public based on their visual characteristics. They include areas designated as scenic vistas and areas that the public may consider to be scenic even if not officially designated. The visual character and quality of an area are influenced by the different land uses within a view, the intactness (i.e., completeness) of a view, and the vividness of a view (i.e., how the view stands out).

Natural and artificial landscape features contribute to the visual character of an area or view. Visual character is influenced by geologic, hydrologic, botanical, wildlife, recreational, and urban features. Urban features include those associated with landscape settlements and development, including roads, utilities, structures, earthworks, and the results of other human activities. The perception of visual character can vary significantly seasonally, even hourly, as weather, light, shadow, and elements that compose the viewshed change.

Changes in hydrology would result in changes in water levels at some reservoirs, which could cause altered views from highways, trails, or other viewpoints because of the increased severity or

duration of bathtub ring effects. Changes in water supply include reduced supply to agriculture, which could result in potential conversion of agricultural land and could affect aesthetic resources if properties are developed or neglected. Other water management actions are also evaluated.

Activities associated with changes in hydrology and changes in water supply would not create a new source of substantial light or glare that would adversely affect day or nighttime views because no construction or other activities that would cause light or glare are contemplated. There would be no impact, and Impact AES-d is not further evaluated in this section.

Section 7.21, *Habitat Restoration and Other Ecosystem Projects*, and Section 7.22, *New or Modified Facilities*, describe and analyze potential aesthetics impacts from various actions that involve construction.

Impact AES-a: Have a substantial adverse effect on a scenic vista

Impact AES-b: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

Impact AES-c: Substantially degrade the existing visual character or quality of the site and its surroundings

Because the impact mechanisms that inform the analyses of scenic vistas, scenic resources viewed from within a state scenic highway, and visual character and quality are similar, Impacts AES-a, AES-b, and AES-c are combined and addressed together.

Changes in Hydrology

Rivers/Streamflows

Changes in streamflows would contribute to the intact, complete, and vivid views of natural landscapes of rivers in the Sacramento/Delta because flows generally would remain within the historical range of flows observed (see Chapter 6, *Changes in Hydrology and Water Supply*). Viewers of the river corridors, including from state scenic highways or national scenic byways, would be expected to experience views that are similar to existing views, with peak flows and higher flows during winter storms and during the snow melt in spring, and lower flows during late summer and fall in some tributaries.

Because of the variability of rivers and the dynamic shoreline, viewers are generally less sensitive to changes in river height and are affected only by severely high or low flows, which the actions associated with changes in hydrology would not change. Altered flows in a river could change water levels and appearance; however, these differences would not constitute a significant change in the river's visual quality because winter and spring flows generally would be higher when compared with the baseline condition, as discussed in Chapter 6, *Changes in Hydrology and Water Supply*. Flows in summer and fall may be lower than the baseline condition; however, these flows are expected to remain within the range historically observed in drier years (see Section 6.3.1, *Flows*). Furthermore, given the existing variability of the volume and duration of river flows, viewers would not be sensitive to these changes. The changes in flow would result in increased Delta outflow, with no significant change in visual quality within the Delta; however, the improved ecosystem health

from the change in flows may result in a healthier riparian ecosystem, which could have visual benefits.

The change in flows in rivers would not significantly alter or adversely change scenic vistas or the visual character or quality of rivers and would not result in any damage to scenic resources such as trees, rock outcroppings, or historic buildings adjacent to a state scenic highway or national scenic byway. More frequent high winter and spring river flows could benefit scenic vistas, views of scenic resources from state scenic highways and national scenic byways, and the visual character of the environment to the extent that increased instream flows contribute positively to the visual quality and scenic value of affected areas. This impact would be less than significant.

Reservoir Levels

Changes in reservoir levels in the Sacramento River watershed and Delta eastside tributaries regions could at times leave more exposed, barren land along the edges of some reservoirs. Under baseline conditions, surface water elevations for reservoirs fluctuate throughout the year. Upper watershed reservoirs and rim reservoirs historically experience substantial changes in water elevation based on operational needs and hydrology. Most of the changes in reservoir elevations resulting from changes in hydrology would be within the historical ranges; however, elevations could be lower more frequently (see Section 6.3.2, *Reservoir Storage and Elevation*, for further discussion on changes to reservoir elevations).

When reservoir storage goes below the maximum capacity, it can result in a bathtub ring, which can be considered a visual impact on some users of that resource or may change the views from highways, trails, or other viewpoints. While peak recreation seasons vary among reservoirs and predominate recreation uses, the majority of use typically occurs during summer months, between Memorial Day and Labor Day. During this period, changes in flows would have the greatest effect on reservoir levels; therefore, the impact analysis focuses on the months of May to September (i.e., the recreation season). The primary potential effect on views of reservoirs would be associated with potential reservoir drawdown that increases the severity or duration of the bathtub ring effect. As discussed in Chapter 6, *Changes in Hydrology and Water Supply*, Section 6.3.2, *Reservoir Storage and Elevation*, and presented in Appendix A1, *Sacramento Water Allocation Model Methods and Results*, changes in reservoir elevations would vary throughout the plan area. Water-level changes at some reservoirs could be large enough to be noticed by viewers and likely would affect scenic vistas, views of reservoirs visible from state scenic highways or national scenic byways, or visual character during certain times of year and toward the higher end of the range of flow scenarios. This impact would be potentially significant.

Implementation of Mitigation Measure MM-AES-a-c: 1 will reduce or avoid aesthetics impacts associated with changes in reservoir levels. Mitigation Measure MM-AES- a-c: 1 incorporates Mitigation Measure MM-AQUA-a,d: 1 for reservoir management. As discussed in Chapter 5, *Proposed Changes to the Bay-Delta Plan for the Sacramento/Delta*, the proposed Plan amendments would require reservoir operators in the Sacramento/Delta to develop and implement long-term strategies and annual operations plans for approval by the State Water Board to implement the cold water habitat objective. That process would reduce changes in reservoir levels and would consider other resources such as aesthetics and recreation. However, some uncertainty exists regarding the precise implementation measures for the cold water habitat objective. In limited instances, aesthetics impacts may result even with mitigation or when mitigation activities take time to implement

effectively. Therefore, aesthetics impacts from changes in reservoir levels remain potentially significant.

Depending on operational needs, reservoirs that receive Sacramento/Delta supply (export reservoirs) in the Bay Area and in other regions south of the Delta may experience changes, including lower elevation levels. Reservoirs in these other regions are also used for recreation and may have scenic vistas. Because the export reservoirs tend to be in more open areas surrounded by grasslands, the impact of lower water levels on scenic vistas and the visual character of these reservoirs would not be as substantial as the impact would be on reservoirs in the Sacramento/Delta. Nevertheless, the effects of reduced reservoir levels in the Bay Area and regions south of the Delta could be potentially significant during the recreation season at some locations, including where there are views of reservoirs from state scenic highways or national scenic byways.

Export reservoirs receiving Sacramento/Delta supply are not subject to the narrative cold water habitat objective and would not be required to develop and implement long-term strategies and annual plans for reservoir operations that would consider aesthetics. However, export reservoirs and streams below export reservoirs are subject to existing regulatory requirements, independent of the Bay-Delta Plan. Implementation of Mitigation Measure MM-AES-a-c: 1 will reduce or avoid aesthetics impacts at export reservoirs. Streams below export reservoirs may be subject to future changes that could result from issuance of new water rights orders or decisions, Federal Energy Regulatory Commission licenses, and other future regulatory requirements. In exercising its regulatory authorities, the State Water Board would consider aesthetics and ensure that any aesthetics impacts are avoided or minimized. However, unless and until the mitigation is implemented, any impacts from changes in reservoir storage levels on aesthetics in export reservoirs in other regions (Bay Area, San Joaquin Valley, Central Coast, and Southern California) that receive Sacramento/Delta supply remain potentially significant.

Changes in Water Supply

Reduced Water Supply

Reduced Sacramento/Delta supply could result in a reduction in irrigation water available for existing agricultural lands and changes to agricultural production or the types of agricultural uses. Agricultural land that is under active production is regularly modified throughout the year. The landscape and views of agricultural land are continually changing with the types of crops grown, which are dictated by numerous variables, such as the seasons and economy. As discussed in Section 7.4, *Agriculture and Forest Resources*, however, a reduction in irrigation water could result in some land being permanently taken out of production and converted to other uses. If this land was left undeveloped, it could function visually as open space, and the change would not adversely affect scenic vistas or visual character. In some areas, especially parts of the Sacramento River watershed and San Joaquin Valley regions where agricultural land faces development pressure, land taken out of agricultural production could be developed for nonagricultural uses. The construction of houses, businesses, or other buildings could adversely affect existing scenic vistas and could substantially affect the existing visual character. If a property owner abandons use and maintenance of existing structures on land removed from agricultural production and the property is left to deteriorate, then those features could contribute to rural blight. This impact would be potentially significant. Implementation of Mitigation Measure MM-AES-a-c: 2, which incorporates Mitigation Measure MM-AG-a,e to reduce the conversion of agricultural land to other uses, will reduce or avoid aesthetic impacts. However, unless and until the mitigation is implemented, any visual impacts from

agricultural land conversion that results in neglected and blighted property remains potentially significant.

The visual quality of the urban environment may be affected by reduced municipal water supply, which could result in dry lawns or reduced park irrigation. As discussed in Section 7.20, *Utilities and Service Systems*, some communities may be more vulnerable than others—particularly in dry years, if their water supply is not enough to meet demand. This vulnerability is true for municipal use that relies primarily on one water source that would be reduced from changes in water supply, without access or funding to develop or use other supplies. If accessible, some water users may increase groundwater pumping using existing infrastructure to meet demands. Health and safety protection for municipal use is a serious issue and is addressed in Chapter 5, *Proposed Changes to the Bay-Delta Plan for the Sacramento/Delta*, and Section 7.20, *Utilities and Service Systems*. Many communities have developed or are developing access to other water supplies in response to drought-related or other reductions in current supply sources and to supplement surface water supplies. Many communities are implementing conservation measures to reduce demand and ensure adequate water for their communities. Reductions in municipal supply sufficient to lead to visual effects are not likely to be widespread in the state. Where they do occur, effects would be localized and likely to be centered in urban/developed settings, rather than scenic vistas. Municipal water and land managers likely would respond to shortages by prioritizing water use to preserve uses, including aesthetics, in areas with the most public exposure, thus minimizing impacts. Urban areas that may be affected visually by reduced water supply, resulting in dry lawns or reduced park irrigation, typically are not visible from state scenic highways or national scenic byways. Overall, existing scenic vistas, scenic resources visible from state scenic highways and national scenic byways, and the existing visual character would not be significantly affected. This impact would be less than significant.

Changes in water supply would result in reduced Sacramento/Delta water supply to wildlife refuges in the Sacramento River watershed and San Joaquin Valley regions (also see Chapter 6, *Changes in Hydrology and Water Supply*, and Section 7.6.1, *Terrestrial Biological Resources*). Sacramento/Delta refuge water supplies typically are used to support seasonally flooded wetlands and summer wetlands at wildlife refuges and wildlife areas, which provide habitat for waterfowl and other wildlife. Decreased Sacramento/Delta water supplies to wildlife refuges could result in a decrease in wetland area over time at these refuges, which could result in slight changes to the visual character of these areas as the wetlands convert to other habitat types. Viewers of refuges likely would not notice the change in the landscape characteristics. Furthermore, the proposed program of implementation also includes specific provisions related to water supplies provided to refuges, including refuge supplies provided pursuant to the Central Valley Project Improvement Act (Sen. No. 484, 102nd Cong. (1991–1992)). This impact would be less than significant.

Other Water Management Actions

Water users may utilize other water management actions to offset reductions in Sacramento/Delta supply, including groundwater storage and recovery, water transfers, water recycling, and water conservation. The diversification of water supply portfolios, in an environmentally responsible manner and in accordance with the law, can reduce aesthetics impacts from reduced water supply, as described previously.

Other water management actions evaluated here do not require new or modified infrastructure and would not result in changes to the aesthetic environment. There would be no effect on scenic vistas,

scenic resources within a state scenic highway or national scenic byway, or the existing visual character in the study area. Municipal water conservation measures, such as low-water landscaping and incentives for landscaping changes, could lead residents to shift to drought-tolerant plants and xeriscaping or leave grass lawns insufficiently watered, turning them brown. This shift could cause a change in the visual character of localized settings but is unlikely to affect scenic vistas or scenic resources within a state scenic highway or national scenic byway, or otherwise degrade the existing visual character or quality of a site and its surroundings. The impact would be less than significant.

7.3.4 Mitigation Measures

MM-AES-a–c: Mitigate impacts of the project that could have a substantial adverse effect on a scenic vista or could substantially damage a scenic resource or degrade the existing visual character or quality of the site and its surroundings

1. **Reservoir Management:** Implement Mitigation Measure MM-AQUA-a,d: 1 (Section 7.6.2, *Aquatic Biological Resources*) to reduce impacts of changes in reservoir levels and related impacts on aesthetics. Specifically, the long-term strategy and annual operation plans for Sacramento/Delta reservoirs (MM-AQUA-a,d: 1.i) will consider impacts on aesthetics from changes in reservoir levels and include measures to avoid or reduce impacts on aesthetics. In addition, all reservoir owners and operators are subject to existing regulatory requirements that protect water quality in reservoirs and streams below reservoirs, including export reservoirs (MM-AQUA-a,d: 1.ii). In exercising its regulatory authorities, the State Water Board will consider aesthetics and ensure that any aesthetics impacts are avoided or reduced.
2. **Measures to Mitigate Conversion of Agricultural Land:** Implement Mitigation Measure MM-AG-a,e (Section 7.4, *Agriculture and Forest Resources*) to reduce impacts of agricultural land conversion.

7.3.5 References Cited

7.3.5.1 Common References

^Delta Protection Commission (DPC). 2019. *President Signs Bill Establishing Sacramento-San Joaquin Delta National Heritage Area*. Press Release. Available: http://delta.ca.gov/wp-content/uploads/2019/03/Delta_NHA_Press_Release_Mar_2019.pdf. Accessed: May 6, 2019.

7.3.5.2 Section References

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National Wild and Scenic Rivers System (NWSRS). n.d. *About the WSR Act*. Available: <https://www.rivers.gov/wsr-act.php>. Accessed: April 13, 2017.