2.22 Cumulative Impacts

2.22.1 Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts on resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

The State CEQA Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the State CEQA Guidelines. A definition of cumulative impacts, under NEPA can be found in 40 CFR 1508.7 of the CEQ regulations.

2.22.2 Approach to Cumulative Impact Analysis

The cumulative analysis takes into consideration other past, ongoing, and reasonably foreseeable projects in the same geographic area as the proposed project, as well as planned land uses and transportation and circulation projections identified in city and county general plan and policy documents.

The existing, ongoing, and proposed projects in Table 2.22-1 have been included in this analysis because they are close to the project area or could affect regional resources. Projects not yet constructed are considered reasonably foreseeable because they are identified and planned by local agencies. This information represents the most up-to-date information available as of the date of publication of this document.

Table 2.22-1. Existing and Proposed Projects Included in Cumulative Impact Analysis

Project Name and Location	Description	Potentially Affected Resources in Common with Proposed Project
Transportation Projects		
SR 65 capacity and operational Improvements (between Galleria Boulevard/Stanford Ranch Road and Lincoln Boulevard in Placer County	Construct capacity and operational improvements on SR 65 from Galleria Boulevard/Stanford Ranch Road to Lincoln Boulevard, including widening to accommodate additional travel lanes (http://pctpa.net/projects/sr65widening/)	• Wetlands and waters of the United States • Biological resources (branchiopods) • Noise • Air quality • Temporary construction impacts (traffic and transportation) • Traffic
Placer Parkway (SR 65 in western Placer County to SR 70/99 in south Sutter County)	Construct an approximately 15-mile long, high-speed transportation facility that will connect SR 65 in western Placer County to SR 70/99 in south Sutter County	• Visual and aesthetics • Air quality • Noise • Water quality • Wetlands and waters of the United States • Biological resources (branchiopods) • Growth • Temporary construction impacts (traffic and transportation) • Traffic
I-80 auxiliary lanes (City of Rocklin on I-80 eastbound from SR 65 to Rocklin Road and City of Roseville westbound from Douglas Boulevard to Riverside Avenue in Rocklin and Roseville)	Construct auxiliary lanes on I-80 for the following two locations (http://pctpa.net/projects/i-80-auxiliary-lanes/): • Eastbound from SR 65 to Rocklin Road • Westbound from Douglas Boulevard to Riverside Avenue	• Biological resources • Water quality • Air quality • Noise • Visual and aesthetics • Temporary construction impacts (traffic)
Various road widening projects in Lincoln (City of Lincoln, Department of Public Works)	Widen existing roads, including Airport Road, Aviation Boulevard, East Joiner and Joiner Parkways, Ferrari Ranch Road, Highway 193, Industrial Avenue, Lakeside Drive, Lincoln Parkway, Nicolaus Road, and Venture Drive	• Traffic
Construction of new and/or extension of roads in Lincoln (City of Lincoln, Department of Public Works)	Construct new roads, including extending Aviation Boulevard, Joiner Parkway (project completed), Dyer Parkway, Fiddyment Road, and Gladding Parkway	• Traffic
Ferrari Ranch Road/ SR 65 Bypass (City of Lincoln, Department of Public Works) -Project Completed	Construct a new interchange at Ferrari Ranch Road/ SR 65 Bypass	• Traffic
Wise Road (City of Lincoln, Department of Public Works)	Realign and construct new overcrossing between SR 65 Lincoln Bypass and existing SR 65	• Traffic
SR 65 Lincoln Bypass (City of Lincoln, Caltrans District 3) -Project Completed	Construct a four-lane expressway from Industrial Avenue to north of North Ingram Slough and continue north with two lanes to Sheridan	• Biological resources • Water quality

Project Name and Location	Description	Potentially Affected Resources in Common with Proposed Project
16th Street (Placer County Department of Public Works)	Construct a four-lane road from the Sacramento/Placer County line to Baseline Road	• Traffic • Air quality • Noise
Widen Baseline Road in Placer County (Placer County Department of Public Works)	Widen Baseline Road to six lanes from Watt Avenue to Fiddyment Road	• Traffic • Air quality • Noise
Various road widenings in Rocklin (City of Rocklin, Division of Engineering)	Widen existing roads, including Rocklin Road, Sierra College Boulevard, and Sunset Boulevard	• Traffic • Air quality • Noise
Construction of new roads in Rocklin (City of Rocklin, Division of Engineering)	Construct new roads, including Valley View Parkway and Whitney Ranch Parkway	• Traffic • Air quality • Noise • Wetlands and waters of the United States
SR 65 & Whitney Ranch interchange (City of Rocklin, Division of Public Services)	Construct the SR 65/Whitney Ranch Parkway interchange; construct a northbound on-/off-ramp with an overcrossing structure and a southbound loop on-ramp; extend Whitney Ranch Parkway to connect to the interchange	• Traffic • Air quality • Noise • Wetlands and waters of the United States • Biological resources (branchiopods)
I-80/Rocklin Road interchange (City of Rocklin, Division of Public Services)	Improve the I-80/Rocklin Road interchange to increase capacity, improve traffic operations, and enhance safety on Rocklin Road	• Traffic • Air quality • Noise
Various road widenings in Roseville (City of Roseville, Department of Public Works)	Widen existing roads, including Blue Oaks Boulevard, Fiddyment Road, Foothills Boulevard, Galleria Boulevard, Pleasant Grove Boulevard, and Sierra College Boulevard	• Traffic • Air quality • Noise
Construction of new and/or extension of roads in Roseville (City of Roseville, Department of Public Works)	Construct new roads, including Westbrook Boulevard, Blue Oaks Boulevard, Roseville Parkway, and Westside Drive	• Traffic • Air quality • Noise
Major Development Projects		
Roseville Hotel & Conference Center (310 Conference Center Drive off of Gibson Drive north of Roseville Parkway; City of Roseville)	Develop a 250-room hotel that includes a restaurant and a parking lot on an 11-acre site; construct a 35,000-square-foot (sf) conference center adjacent to the hotel	• Traffic • Air quality • Biological resources: species, wetlands • Noise
HP Campus Oaks Project (1485 Blue Oaks Boulevard; City of Roseville)	Develop the site as a mixed-use project that would include residential uses of varying densities, commercial and office/tech uses, parks, and a fire station	• Traffic • Air quality • Biological resources • Water quality • Noise

Project Name and Location	Description	Potentially Affected Resources in Common with Proposed Project
NCRSP Parcel 49 (9000 Washington Boulevard, southeast corner of Washington Boulevard & Blue Oaks Boulevard; City of Roseville)	Develop the approximately 59-acre site with a 387,632-sf mixed-use development that features a 64,232-sf indoor and outdoor recreational golf facility, 130,000 sf of community assembly use (a church), 116,500 sf of office space, a 125-room hotel, 11,200 sf of restaurant space, and 37,800 sf of retail space. The project will include frontage improvements along Washington Boulevard and realignment of the bike trail along the southern property line, as well as onsite parking, landscaping, plaza spaces, lighting, and pedestrian paths.	• Traffic • Air quality • Water quality • Biological resources • Noise
VillaSport Athletic Club & Spa (310 Conference Center Drive; City of Roseville)	Construct an approximately 88,000-sf building and an approximately 50,000-sf outdoor area. Outdoor amenities would include an outdoor pool area with two swimming pools (one with 25-foot slides), whirlpools, an outdoor café, an outdoor play area with play structures, and an area for a potential future artificial turf field. The outdoor pool area would be surrounded by a fence and landscaping. The proposed facility would operate from 5:00 a.m. to 11:00 p.m., 7 days a week. The project anticipates hiring approximately 250 employees.	• Traffic • Air quality • Water quality • Noise
Lifetime Fitness (1435 East Roseville Parkway, Stoneridge Specific Plan Area; City of Roseville)	Construct a 120,000-sf fitness center, outdoor pool, and 14 tennis courts with related site improvements including parking, site/building lighting, and landscaping. In addition, a minor Ordinance Amendment to add outdoor recreation as a conditionally permitted use in the Community Commercial (CC) zone, a Conditional Use Permit to allow outdoor recreation in the CC zone, and a Specific Plan Amendment to eliminate two parcel-specific conditions are proposed.	• Traffic • Air quality • Noise • Biological resources (migratory birds)

Sources: Fehr & Peers 2014; <http://www.sacog.org/mtp/2035/eir/Appendices/Appendix%20A%20-%20Common%20Projects%20&%20Proposed%20Project/Appendix%20A.pdf>; <http://www.rocklin.ca.us/depts/ps/current_projects/default.asp>; <http://www.roseville.ca.us/gov/development_services/planning/current_projects/default.asp>; <http://www.placer.ca.gov/~/media/cdr/ECS/CurrentProjects/2014/current%20projects%2011.14%20-%20BOS%20area.pdf>.

2.22.3 Assessment of Cumulative Impacts

The current health and historical context of the resources considered in this analysis are presented in the "Affected Environment" sections of Chapter 2. None of the build alternatives would contribute to a cumulative impact in the following resource areas because the resources are in generally good health and the build alternatives would result in beneficial impacts, no impacts, or minor impacts that would be fully mitigated (to a less-than-significant level under

CEQA). Consequently, the contribution to a cumulative impact on the following resources would not be considerable.

- Land Use
- Growth
- Community Impacts
- Cultural Resources
- Pedestrian and Bicycle Facilities
- Hydrology and Floodplain
- Geology/Soils/Seismic/Topography
- Paleontology
- Hazardous Waste/Materials
- Energy
- Biological Resources (Plant Species and Animal Species)

2.22.3.1 Human Environment

Utilities/Emergency Services

The resource study area for cumulative effects to utilities/emergency services includes the geographic area of the ongoing and future projects listed above, which generally coincides with the land use study area (Figure 2.1-1).

All project impacts pertaining to utilities and emergency services would be temporary and related to construction activities (e.g., relocation of utility lines). Construction activities would be coordinated with service providers. Notification of construction activity would be provided in accordance with the TMPs for each project site, and emergency access would be maintained to prevent unanticipated disruptions and delays. Therefore, the proposed project, in combination with other projects, is not considered to result in an adverse effect on utilities/emergency services, and the proposed project's incremental effects to utilities and emergency services are not cumulatively considerable.

Traffic and Transportation

The resource study area for cumulative impacts related to traffic and transportation is the same as that used for the traffic analysis (Figure 2.5-1). Projects that would contribute to potential cumulative impacts include all transportation and development projects assumed in the traffic modeling assumptions for the *Transportation Analysis Report* (Fehr & Peers 2014).

As discussed in Section 2.5, traffic forecasts for design year (2040) analysis were developed for the three build alternatives and the No Build Alternative. All three build alternatives improve overall network performance compared to no-build conditions. In addition, both a.m. and p.m. 2020 and 2040 HOV travel times are better than existing conditions for all build alternatives, and serve nearly all of the peak-period demand volume. Where adverse effects resulting from project

build alternatives are identified (see detailed discussion of Design Year and Construction Year Traffic Operations Impacts in Section 2.5.3.1), implementation of the measures listed in Section 2.5.4 would reduce the effects.

Temporary adverse effects associated with construction would be reduced by implementation of a TMP (see Section 2.5.4.1). In addition, the project alternatives, to varying degrees, would result in net benefits to traffic and transportation. Therefore, the project is not considered to result in a cumulatively considerable impact on traffic and transportation.

Visual/Aesthetics

As discussed in Section 2.6 and shown in Figure 2.6.1, the resource study area for aesthetics comprises the visual assessment units designated as I-80 Corridor, SR 65 Corridor, Open Space, Residential, and Commercial/Institutional.

The combined visual effect of this project and other development projects planned, recently in construction, or currently in construction would change the visual character of the region. As described in the *Community Impact Assessment* (ICF International 2014), Roseville and Rocklin General Plans and the *Placer County Regional Transportation Plan 2035* will contribute to growth and development within and surrounding the project area. These plans, once implemented, will expand and improve existing transportation corridors, create new and reconfigured transportation corridors, and induce development and infill of open space areas and vacant lots within the project vicinity. These plans also will allow for continued growth and development to occur around the project area. The proposed project is driven by forecasted local and freeway traffic operations that would result from implementation of the plans described above, and would support the existing and planned future land uses in the vicinity. All three proposed alternatives would result in the same cumulative visual impacts.

Construction impacts associated with the project would result in cumulative visual impacts because they would be long term and compound the visual presence of construction in the area, especially when factored with other larger scale development and transportation projects. Planned development and transportation projects also would alter the existing visual character of the area in the long term, including the open space areas and vacant lots located in the project vicinity.

Development in the project vicinity would contribute to changes in the visual quality of views as seen from all visual assessment units. Roadway users, residents, businesses, and recreationists will be able to see open space areas and vacant lots within the landscape gradually transition and infill to industrial, mixed-use, commercial, and residential development; this development will include the associated transportation and utility infrastructure needed to support it. Other large-scale transportation projects would widen segments of I-80, SR 65, and local connectors and create larger roadways, such as the Placer Parkway project that would widen nearby segments of SR 65 and Whitney Ranch Parkway. Widening associated with the I-80/SR 65 project would contribute to cumulative visual impacts by replacing narrower freeways with wider ones, affecting the associated vegetation and viewers.

Future development and roadway improvements also would add to ambient atmospheric lighting and glare in the area by infilling unlit open space areas with lit buildings and roadways, and by

adding reflective surfaces to an area that is currently undeveloped. The proposed project, however, would contribute only incrementally to cumulative impacts associated with lighting because highway lighting would not greatly increase as a result of the project.

The project would contribute to visual changes related to planned and/or proposed development in the area because it would alter the existing visual landscape, degrade the visual quality of the project area, and negatively affect highways users and highway neighbors. Implementation of the mitigation measures identified in Section 2.6 would reduce the project's impact on visual resources but not to a less than cumulatively considerable level. Therefore, the project's cumulative effects to visual resources would be cumulatively considerable.

2.22.3.2 Physical Environment

Water Quality and Stormwater Runoff

The resource study area for cumulative water quality and stormwater runoff effects is the two HSAs that the project limits cross, Lower American (HSA #519.21) and Pleasant Grove (HSA #519.22) within the hydrologic unit: Valley-American. Valley American-Lower American includes Antelope Creek, Miners Ravine, Secret Ravine, and Sucker Ravine. Pleasant Grove includes Highland Ravine and the tributary to the south branch of Pleasant Grove Creek. The project crosses or is adjacent to several water bodies. Table 2.9-1 presents a cumulative list of streams and creeks that cross or flow adjacent to I-80 and SR 65 within the project limits.

The proposed project and other projects in the area would introduce new impervious surfaces. This would result in an incremental reduction in the amount of natural soil surfaces available for infiltration of rainfall and runoff, thereby potentially generating additional runoff during storm events. Additional runoff can contribute to the flood potential of natural stream channels and accelerate soil erosion and stream channel scour. Furthermore, there is the potential for reduced water quality from the introduction of contaminants (contaminants used in maintenance and landscaping or resulting from an accidental spill), erosion (increased turbidity), and the loss of wetlands and other jurisdictional waters. All state and local projects, including the proposed project, must incorporate construction stormwater treatment measures, erosion control measures, and stormwater runoff control measures to meet the water quality regulations of the Central Valley RWQCB. With each project meeting the requirements of the RWQCB, no net effect to water quality is expected. Therefore, the proposed project, in combination with other projects and on its own, would not contribute to a cumulative impact on water quality.

Air Quality

The project is located in Placer County, which spans three air basins; however, the project is located entirely in the SVAB, the resource study area. The SVAB includes Sacramento, Shasta, Tehama, Butte, Glenn, Colusa, Sutter, Yuba, and Yolo Counties, as well as parts of Solano and Placer Counties. The SVAB is bounded on the west by the Coast Ranges and on the north and east by the Cascade Ranges and Sierra Nevada. The San Joaquin Valley Air Basin lies to the south.

The primary pollutants of concern in the project area are O_3 and its precursors, ROG and NO_X, as well as CO, PM10, and PM2.5. O_3, PM10, and PM2.5 are considered to be regional pollutants

because they affect air quality on a regional scale. Refer to Section 2.13, "Air Quality," for further discussion on the existing setting related to air quality.

Construction Activities

Construction of the proposed project would not result in adverse impacts on air quality, with the implementation of standard construction control measures. Short-term effects during construction would be minimized through compliance with Caltrans Standard Specifications and requirements of permits obtained for the project. Therefore, project-related construction activities are not expected to contribute to cumulative impacts on air quality. In addition, implementation of the avoidance and minimization measures identified in Section 2.13 would further reduce the project's incremental contribution to cumulative impacts on air quality.

Operational Impacts

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for CO, NO_2, O_3, and particulate matter (PM10 and PM2.5). Phase 1 of the proposed project is included in the regional emissions analysis conducted by SACOG for the conforming *2035 Metropolitan Transportation Plan/Sustainable Communities Strategy* (MTP/SCS) and 2015–2018 Metropolitan Transportation Improvement Program (MTIP) (SACOG ID PLA25440). The complete project (i.e., Phases 1 through 4) will be included in the regional emissions and conformity analysis for the upcoming 2036 MTP/SCS. Adoption and federal approval of the 2036 MTP/SCS is expected in early 2016, prior to the final environmental document for the proposed project. Accordingly, the regional emissions modeling conducted for the 2036 MTP/SCS would ensure that, prior to preparation of the final environmental document for the proposed project, the design, concept, and scope for the project will be consistent with the description in the 2036 MTP/SCS and the "open to traffic" assumptions in SACOG's regional emissions analysis. Section 2.13 also includes a discussion of how the proposed project meets project-level conformity requirements for CO and particulate matter. Based on the results shown in Section 2.13, the project would conform both regionally and at a project level to the State's plan for attaining NAAQS. The project would not contribute to a cumulative effect on air quality conformity.

The regional emissions modeling and analysis conducted by SACOG for the MTP/SCS considers all planned and programmed transportation projects included in the MTP and MTIP. The transportation projects listed in Table 2.22-1 have been analyzed and found not to contribute to a substantial impact on air quality. In addition, the development projects in Table 2.22-18 are subject to air quality permitting requirements. Projects that are in conformance with the regional air quality plan and that meet regional air pollutant budgets (based on air quality models and analyses) would not be expected to result in a cumulative impact on air quality. Therefore, impacts of the proposed project on air quality are not expected to be cumulatively considerable.

Noise

The resource study area for noise is the area around the project containing the sensitive receptors shown on Figure 2.14-2. Temporary increases in noise could occur during construction activities. However, implementation of Caltrans Standard Specifications and compliance with applicable local noise standards to minimize the temporary noise effects of construction would ensure that noise impacts caused by construction would be short term and not adverse. Other projects are required to adopt similar noise-reduction measures either as directed by Caltrans or as a result of

local noise ordinances. Consequently, the proposed project is not expected to contribute to a cumulative impact related to construction noise.

For consideration of cumulative impacts from operation of the proposed project, this analysis examines whether implementation of the project would make a considerable contribution to noise levels compared to design year (2040) no-build conditions. The analysis of noise level changes resulting from roadway operations is inherently cumulative because the traffic forecasts use build-out assumptions. Noise levels for design year no-build conditions range from 48 to 78 dBA Leq(h). Under design year build conditions (under any of the build alternatives), predicted traffic noise levels range from 49 to 79 dBA Leq(h). Because traffic noise levels are predicted to exceed the noise abatement criteria for some residential, recreational, and business land uses in the project area, noise abatement was considered (see the discussion of noise abatement in Section 2.14). The proposed project's increase in noise levels would contribute to a cumulative noise impact. Implementation of the noise abatement measures (i.e., construction of soundwalls) identified in Section 2.14.4.1 would reduce traffic noise impacts for the project to acceptable levels. Therefore, the project's contribution to noise impacts is not expected to be cumulatively considerable.

2.22.3.3 Biological Environment

The resource study area for the biological environment is the BSA. As described in Sections 2.16 – 2.21, the BSA generally comprises the limits of disturbance (including areas to accommodate temporary construction activities and staging) and undeveloped habitats within 100 feet of these limits to account for potential indirect effects to nearby aquatic resources and elderberry shrubs. The BSA also includes an area up to 250 feet from the limits of disturbance where vernal pools are present. The extent of the BSA is shown in Figures 2.16-1 through 2.16-3. Approximately two-thirds of the BSA consists of highways, commercial development, and residential areas. The remainder consists of graded parcels, designated Open Space with bike/pedestrian trails areas (i.e., Antelope Creek Trail, Miners Ravine Trail), and natural areas (e.g., grasslands, oak woodland, and streams). The BSA has a relatively high level of historical and ongoing disturbance.

Natural Communities

The BSA supports both common natural communities and natural communities of special concern. Common natural communities are habitats with low species diversity that are widespread, reestablish naturally after disturbance, or support primarily non-native species. These communities generally are not protected by agencies unless the specific site is habitat for or supports special-status species (e.g., raptor foraging or nesting habitat, upland habitat in a wetland watershed). The only common natural community in the BSA is annual grassland. The vegetation communities in the BSA that meet the criteria for natural communities of special concern are non-wetland riparian forest and oak woodland.

Non-wetland riparian forest in the BSA occurs along Antelope Creek, Miners Ravine, and Secret Ravine. Portions of this riparian forest also include SRA cover habitat that provides shade for anadromous fish. Riparian communities are considered sensitive locally, regionally, and statewide because of their habitat value and declining distribution.

Oak woodland in the BSA occurs upslope of the west side of Antelope Creek and along Miners Ravine and Secret Ravine. The overstory of oak woodland in the BSA typically consists of blue oak and interior live oak but also contains valley oak.

The BSA contains numerous native oak trees that would qualify for protection under the tree preservation ordinances of the City of Roseville or the City of Rocklin. Native oak species known to occur in the BSA are valley oaks, interior live oaks, and blue oaks. Most of the protected trees that would be affected by implementation of the proposed project occur within the non-wetland riparian forest and oak woodland.

Implementation of the proposed project, in combination with other local and regional projects, has the potential to contribute to the cumulative loss of non-wetland riparian forest, oak woodland, and other protected trees in the project vicinity. The cumulative effects are discussed below.

Non-Wetland Riparian Forest

The proposed project and other transportation and development projects in Placer County have the potential to contribute to the cumulative loss of riparian habitat. Indirect impacts can be caused by disturbances adjacent to riparian woodland and have the potential to add to the cumulative loss of these natural communities. However, with implementation of the avoidance and minimization efforts and compensatory mitigation described in Section 2.16, construction of the proposed project would not add to the cumulative loss of riparian forest and would not result in a cumulatively adverse effect to riparian forest.

Oak Woodland

Cumulative impacts on oak woodland would result from construction of other general development projects in Placer County. With implementation of the avoidance and minimization efforts and compensatory mitigation described in Section 2.16, construction of the proposed project would not add to the cumulative loss of oak woodlands and would not result in a cumulatively adverse effect to oak woodlands.

Protected Trees

Most of the protected trees that would be affected by implementation of the proposed project occur within the non-wetland riparian forest and oak woodland. As described in Section 2.16, impacts on protected trees will be minimized as a certified arborist will be retained to conduct a tree survey in order to quantify the number of protected trees that would be affected by implementation of each project alternative. Avoidance and minimization measures are listed in Section 2.16.4. Unavoidable impacts on protected trees will be compensated for in accordance with the requirements of the applicable jurisdiction's tree preservation ordinance. The compensation will consist of planting replacement trees or paying an in-lieu fee. With implementation of the prescribed avoidance and minimization efforts and compensatory mitigation, construction of the proposed project would not add to the cumulative loss of protected trees and would not result in a cumulatively adverse effect to protected trees.

Wetlands and Other Waters

Cumulative impacts on wetlands and other waters would result from construction of other transportation and general development projects in Placer County. Construction of the proposed

project would add to the cumulative loss of wetlands. Direct impacts can result from the placement of fill within a wetland or drainage. Indirect impacts can be caused by the accumulation of sediment in wetlands and drainages resulting from adjacent disturbances. Both direct and indirect impacts can add to the cumulative loss of wetland and drainage habitat. However, with implementation of the measures prescribed for minimizing impacts and compensating for remaining impacts as discussed in Section 2.17, the proposed project's incremental contribution to cumulative impacts on wetlands and other waters would not be cumulatively considerable.

The project would result in direct and indirect loss of up to 0.265 acre of wetland habitat and up to 0.056 acre of other water habitat. Indirect impacts associated with the proposed project would be minimized through avoidance and minimization measures in Section 2.17, and through implementation of BMPs required under Section 404 permit conditions. Most projects are required to comply with similar requirements under Section 404 of the CWA. These laws require no net loss of the function or value of the nation's or state's wetlands. Although this may not be achieved on every project, regulations ensure that, on the whole, cumulative impacts on wetlands under state and federal jurisdiction are reduced, and even improved, over time. Consequently, the project is not anticipated to result in a considerable contribution to cumulative impacts on wetlands and other waters.

Threatened and Endangered Species

As discussed in Section 2.20, three federally listed species (VELB, vernal pool fairy shrimp, and Central valley steelhead) and two state-listed species (Swainson's hawk and tricolored blackbird) could occupy the BSA based on the presence of suitable habitat. Under all three build alternatives, direct and indirect impacts could occur to these species. Avoidance, minimization, and/or mitigation measures to reduce effects to these special-status species are identified in Section 2.20. In addition, as part of consultation with USFWS and NMFS under Section 7 of the FESA, the project impacts on VELB, vernal pool fairy shrimp and Central valley steelhead will be addressed. Other projects are also required to comply with FESA and protect threatened and endangered species or compensate for impacts to ensure the continued existence of the species. These measures would reduce or mitigate project impacts so that no effect to the long-term health or stability of these species, and no cumulative impact, would result from project implementation.

Invasive Species

As described in Section 2.21, invasive plant species include species designated as federal noxious weeds by USDA, species listed by CDFA, and invasive plants identified by Cal-IPC. Invasive plants displace native species, change ecosystem processes, alter plant community structure, and lower wildlife habitat quality. Road, highway, and related construction projects are some of the principal dispersal pathways for invasive plants and their propagules. No plant species designated as federal noxious weeds have been identified in the BSA. Most of the invasive plant species occur in annual grassland, along roadways, and in disturbed/graded areas. Table 2.21-1 identifies the invasive plant species that CDFA and Cal-IPC have identified as occurring in the BSA.

Federal agencies are required to comply with EO 13112 (Invasive Species) as part of NEPA analyses. CEQA requires that state and local agencies identify and avoid, minimize or mitigate

substantial habitat modifications, such as those that could be caused by invasive species. Ground disturbance and construction vehicle traffic associated with the projects listed in Table 2.22-1 and the proposed project have the potential to contribute to the introduction and spread of invasive plant species. The projects would be required to avoid, minimize or mitigate potential effects under the EO or state requirements, or both, depending on federal agency involvement, to prevent the spread of invasive species. With implementation of the prescribed avoidance and minimization measure described in Section 2.21, the proposed project would not substantially contribute to cumulative impacts related to the spread of invasive plants.

2.22.4 References Cited

Fehr & Peers. 2014. *Transportation Analysis Report – I-80/SR 65 Interchange Improvements. Roseville, CA.* August.

ICF International. 2014. *Community Impact Assessment – I-80/SR 65 Interchange Improvements Project, Placer County, Interstate 80 and State Route 65*. Sacramento, CA. November.