

5.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT EVALUATION

The Federal Highway Administration (FHWA) with the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1). Specifically, the action being considered and evaluated by FHWA, Caltrans and SPRTA is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. Placer Parkway is intended to reduce anticipated congestion on both the local and regional transportation system and to advance economic development goals in south Sutter County and southwestern Placer County.

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term “Proposed Action” is used to describe the selection of a corridor to preserve. The document generally uses the term “Parkway” to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

Each phase will be subject to its own environmental review, a process known as “tiered” environmental review under both state and federal law. The selection of a corridor is the subject of this Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/ Environmental Impact Report (hereinafter referred to as the Tier 1 EIS/EIR). As discussed below, to the degree feasible this Tier 1 EIS/EIR reviews the reasonably foreseeable environmental effects of the construction and operation of the Parkway. Selection of a more precise alignment within the corridor, and construction and operation of the Parkway, will be the subject of a later, Tier 2 environmental document.

“Tiering” is a streamlining tool for environmental review of large projects with several environmental review stages or phases. It is a way to focus environmental studies at an appropriate level of detail for each phase of the project. The Tier 1 document allows the agencies to focus on broad topics such as general location, mode choice, area-wide air quality and land use, and other environmental issues. The Tier 2 document involves more focused environmental analyses that address a narrower geographical area, a more focused set of issues, and a specific roadway alignment. The Tier 2 document relies on a summary of the work in the Tier 1 document, thereby avoiding unnecessary repetition. The Tier 2 document can then focus on additional details available in later stages of project planning such as design, construction, operation, and maintenance of the proposed project.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway “footprint” within the selected corridor, including construction and operation of the roadway.

Given the existing and projected rapid growth in and around the study area, it is vital to select a corridor as early as feasible, so that the location of the future Placer Parkway can be considered in local

jurisdictions' planning decisions. Also, it is important to select a corridor before new development reduces corridor options or increases right-of-way acquisition costs. A tiered approach to Parkway planning was selected in order to address these concerns and select a corridor for the Parkway before design and engineering are initiated. Although some designs for the Parkway have been developed during Tier 1, to the extent required for environmental analysis, such designs are entirely conceptual and are subject to further engineering and refinement during subsequent Tier 2 analysis. Construction-level engineering would not occur until a specific alignment for the Parkway is selected based on the Tier 2 environmental analysis.

Once the Tier 1 EIS/EIR is completed and a corridor is selected, local governmental agencies may take steps to preserve land within the selected corridor, using their own funds. This can be accomplished through a combination of mechanisms, including but not limited to fee simple acquisition, purchase of rights of first refusal, grants or transfers of land, grants or purchases of permanent easements, and similar means.

Tier 1 is called a program-level analysis pursuant to California Environmental Quality Act (CEQA) Guidelines §15161. CEQA requires that each significant impact be identified in the EIR (Public Resources Code Section 21082.2). In this chapter, references to significant adverse impacts of the Placer Parkway alternatives are made to fulfill the requirements of CEQA.

No representation as to significance made in this chapter represents an assessment of the magnitude of such an impact under the requirements of federal law. Under NEPA, no determination need be made for each environmental effect. The Council on Environmental Quality (CEQ) regulations implementing NEPA state that “significantly” as used in NEPA requires consideration of both context and severity/intensity. The CEQ regulations recognize that the significance of an action must be analyzed in several contexts such as the society as a whole, the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action (40 CFR Section 1508.27).

This CEQA impact analysis incorporates and relies upon the information contained in all other Tier 1 EIS/EIR chapters. The same technical reports and analyses used in other chapters of this Tier 1 EIS/EIR is used as the basis for the CEQA significance conclusions provided in this chapter. The thresholds of significance applied to impacts in this chapter are the same as the as the evaluation criteria identified in Chapter 4 used to assess the potential effects of Parkway alternatives. The following CEQA analysis identifies the significance of each adverse impact before and after the application of mitigation strategies. No impacts are identified for the No-Build Alternative, unless specifically identified below. Other required CEQA sections such as Cumulative Impacts and the Environmentally Superior Alternative, are also provided.

The conclusions apply to all alternatives, unless otherwise specified.

5.1 LAND USE

Information regarding land use is found in Section 4.1, and in the Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007) which is available at the locations identified in the Executive Summary, including the Placer County Transportation Agency (PCTPA) web site.

5.1.1 Significant and Unavoidable Impacts

Land Use Conversion

Table 4.1-3 in Section 4.1, Land Use, shows the potential impacts on land conversion by build alternative. Alternative 1 would affect the greatest amount of total land acreage, while Alternative 4 would affect the

least. Impacts related to land conversion would be significant and unavoidable because all alternatives would result in conversion of substantial amounts of agricultural land to infrastructure-related uses (conversion of all land uses would range from 1,623 to 1,918 acres, depending on the alternative). Because of the extent of agricultural lands affected and the scarcity of opportunities to replace existing agricultural uses, SPRTA has determined that mitigation strategies would not be expected to reduce impacts to a less-than-significant level.

Compatibility with Proposed Land Uses

All of the project build alternatives would affect the ongoing planning processes for the Placer Ranch Specific Plan, Brookfield, the Reason Farms Master Plan update, and the Sutter Pointe Specific Plan. Alternatives 1 and 2 would also affect the proposed Regional University Specific Plan and the Curry Creek Community Plan, which is still in the conceptual stage. Alternatives 4 and 5 represent the general alignment being considered by Sutter County in its Sutter Pointe Specific Plan planning process. Because there are no adopted plans for these areas at present, the actual effects are not known. Adoption of a Parkway corridor alignment through these developments would, of necessity, affect the development plans, because subsequently the developments would need to accommodate the corridor alignment selected. This could be a significant impact, depending on the status of planning efforts by local jurisdictions. It could also potentially benefit these projects by lending certainty to the location of a major transportation corridor that has been planned for some time but not adopted. Because there is uncertainty with respect to the adjacent land uses, this impact is considered potentially significant. No mitigation is available because SPRTA has no authority over local jurisdictions' planning processes or land uses, or the timing of the ongoing planning processes in the study area.

Consistency with Applicable General Plan Policies

Sutter County General Plan policy 6.A.1 requires the County to preserve agriculturally designated areas for agricultural uses and direct nonagricultural development to areas designated for urban/suburban growth, or rural communities and/or cities. All alternatives lie within land designated as agricultural in Sutter County, including the lands within the area designated as Measure M (within which the Sutter Pointe Specific Plan is proposed), where alternatives identify the conceptual location of interchanges to serve proposed future development. All alternatives would conflict with this policy. While there are no feasible measures to preserve all existing agricultural land in Sutter County affected by the Parkway, a portion of the area through which any of the Parkway alternatives would be constructed is designated for growth through its underlying General Plan designation (Industrial Reserve) and through the effects of implementation of Measure M.

Placer County General Plan policies 7.A.1, 7.A.2, 7.A.3, 7.A.7, 1.H.3, and 1.H.4 are aimed generally at preserving farmland and agricultural uses in the study area. To the extent that all Placer Parkway alternatives would use land currently designated agricultural, they could divide parcels currently used for agriculture and would diminish the size of some agricultural parcels. Therefore, they would conflict with these policies.

Four Sunset Industrial Area Plan policies, 1.E.1, 1.E.2, 1.E.3, and 1.E.4, are identical to Placer County General Plan policies 7.A.1, 7.A.2, 7.A.3, and 7.A.7, respectively, and the Parkway alternatives would also conflict with these policies.

The only agriculturally designated land within the Sunset Industrial Area Plan (SIAP) affected by this project (Eastern Segment) is undergoing review by Placer County for urban development and amendment to the SIAP. The decisions regarding this agricultural land are anticipated to be made prior to a Record of Decision and certification of the Placer Parkway Tier 1 EIS/EIR.

Conflicts with general policies aimed at preserving and enhancing agricultural uses, while under threat from other development proposals as well, would be a significant and unavoidable impact. The only potential mitigation strategy would be to amend applicable plan policies related to preservation of agricultural lands, which SPRTA has determined would not be feasible.

5.1.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Potentially Bisected Parcels

Alternative 5 would potentially bisect the most parcels in the study area, while Alternative 1 would bisect the fewest parcels, as shown in Table 4.1-3 in Section 4.1, Land Use. Mitigation strategies include General Plan Amendments or Zoning Ordinance Amendments to change General Plan land use designations and zoning. For parcels no longer meeting minimum size requirements, alternative mitigation could include enactment of a zoning overlay district for parcels reduced in size that would recognize the special nonconforming nature of these properties or purchase of remainder parcels in their entirety to eliminate the zoning conflict. With implementation of these mitigation strategies, this impact would be less than significant.

Compatibility with Adjacent Land Use

All alternatives would have similar issues of compatibility with adjacent land uses. The project area and adjacent surrounding areas are primarily used for agriculture. The project's effects on commercial, industrial, and public facilities would not be expected to adversely affect land use within the study area because the Parkway would potentially benefit those land uses. The project would purchase more right-of-way than is required for the footprint of the Parkway, partly to create a buffer between adjacent land uses and minimize the project's impacts to farmland and other agricultural uses. Local access would be maintained. Incompatibility with adjacent land uses would be less than significant. No mitigation is warranted.

Consistency with Zoning Acreage Requirements

Alternatives 3 and 5 would create one inconsistent parcel, while Alternatives 1 and 2 would each create two parcels that would be inconsistent with the minimum parcel size requirements under existing zoning. Alternative 3 would affect the fewest parcels that are already inconsistent with the existing zoning, while Alternative 5 would affect the most. Mitigation strategies include General Plan Amendments or Zoning Ordinance Amendments to change General Plan land use designations and zoning. For parcels no longer meeting minimum size requirements, alternative mitigation could include enactment of a zoning overlay district for parcels reduced in size that would recognize the special nonconforming nature of these properties or purchase of remainder parcels in their entirety to eliminate the zoning conflict. With implementation of these mitigation strategies, this impact would be less than significant.

Consistency with Applicable General Plan Policies and Other Local Plans

The proposed project would potentially conflict with certain policies contained in the Sutter County General Plan, the Placer County General Plan, and the Sunset Industrial Plan Area, which are described below.

The Sutter County General Plan policy C-6b states that "no parcel meeting the minimum parcel size as identified on the General Plan land use diagram shall be diminished to a size less than the minimum parcel size as identified on the land use diagram." Policies 6.A-6 and 6.A-7, related to preservation of

farmlands, are similar. The project has the potential to conflict with these policies, as it could create remnant parcels that do not meet the minimum size requirements under current zoning.

Conflicts with General Plan policies identified above are considered significant without mitigation. Mitigation strategies include General Plan Amendments or Zoning Ordinance Amendments to change General Plan land use designations and zoning. For parcels no longer meeting minimum size requirements, alternative mitigation could include enactment of a zoning overlay district for parcels reduced in size that would recognize the special nonconforming nature of these properties or purchase of remainder parcels in their entirety to eliminate the zoning conflict. With implementation of these mitigation strategies, impacts related to minimum parcel size would be less than significant.

A Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP), called the Placer County Conservation Program (PCCP), is currently under development by Placer County. It would cover the lands in Placer County through which all of the Placer Parkway alternatives would traverse. SPRTA is working with Placer County staff to ensure that the Parkway would not conflict with the PCCP. The Placer Parkway could be a covered activity under the PCCP. It is unknown exactly if or when the plan will be adopted or implemented. Since the PCCP is not adopted, there are no conflicts and therefore no impacts would occur. No mitigation is warranted.

5.2 POPULATION AND HOUSING

Information regarding population and housing is found in Section 4.2, and in the *Community Impact Assessment* (Mara Feeney & Associates and North Fork Associates, 2007), which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.2.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts to population and housing with mitigation.

5.2.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Disruption or Division of the Physical Arrangement of an Established Community or Employment Center

Four rural residential areas occur in the study area. None of the alternatives would directly affect any existing community services in the study area, such as schools or fire stations. Alternative 1 would take up to 120.6 acres of the rural residential community located on the north side of Baseline Road in the Central Segment. The alignment would not split or divide this community, but it would remove a strip of land along a one-mile section at the northern end of this community, removing several rural residential homes. Alternatives 4 and 5 would directly affect about 15 acres at the northwestern corner of the Sankey-Pleasant Grove community and would impact several residences located east of the Union Pacific Railroad (UPRR) tracks in this vicinity. While these alternatives would not split or divide this community, they would affect several rural residential properties along its northern edge, near the railroad right-of-way north of Sankey Road. This would be a potentially significant impact. Since no vital community services or gathering places would be in either of the two affected areas, it may be possible to mitigate this potential impact and minimize potential adverse effects in these areas by relocating the displaced households within or close to the affected rural residential communities, if they so desire. Since no vital community services or gathering places would be affected in either of these two areas, no mitigation is required beyond standard provisions of the Uniform Relocation and Real Property Acquisition Assistance Act. With implementation of these mitigation strategies, impacts would be less than significant.

Displacement of People, Businesses, or Jobs

Each of the corridor alignment alternatives would displace several isolated homes or farmsteads, ranging from three (Alternative 3) to ten (Alternative 5) (see Table 4.2-11 in Section 4.2, Socioeconomics). Alternatives 1, 4, and 5 each would affect a rural residential community in the study area. Alternative 1 would have the greatest impact, on 120.6 acres of the rural residential settlement on the north side of Baseline Road, compared with 14.7 acres in the Sankey-Pleasant Grove area that would be affected by Alternatives 4 and 5. Depending upon the project alternative selected and the size of the households displaced, the number of persons displaced could range from less than ten to more than thirty. This would be a potentially significant impact. It may be possible to relocate the affected homes to vacant land in the vicinity. If not, there should be suitable replacement housing in the area, making the construction of new replacement housing unnecessary. These residential displacements would be mitigated as required by the Uniform Relocation Assistance and Real Property Acquisition Act of 1970. With implementation of these mitigation strategies, impacts would be less than significant.

All of the build alternatives would directly affect the same employment center in the Eastern Segment, in the Sunset Industrial Area, and would not affect any employment centers in the Central Segment (see Table 4.2-12). Alternatives 1, 2, and 3 would not directly impact any employment centers in the Western Segment, while Alternatives 4 and 5 would impact several businesses located on the south side of Sankey Road. This would be a potentially significant impact. Any businesses displaced by the project would receive relocation assistance payments and counseling in accordance with the Federal Uniform Relocation Assistance and Real Properties Acquisition Policies Act. With implementation of this mitigation, impacts would be less than significant.

5.3 FARMLANDS

Information regarding farmlands is found in Section 4.3, and in the Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.3.1 Significant and Unavoidable Impacts

Farmland Conversion

The project would convert between 792.46 (Alternative 4) and 990.06 (Alternative 2) acres of farmland, depending on the alternative selected (see Table 4.4-8). This would be a significant and unavoidable impact of the project because this is a substantial amount of farmland conversion, and converting substantial amounts of farmland is inconsistent with state and county goals and policies relative to the importance of maintaining farmland resources. Two strategies for mitigation of farmland impacts are provided in Section 4.4.4.1. Mitigation Strategy No. 1 would provide full replacement of the agricultural land lost for the Parkway, and Mitigation Strategy No. 2 could also provide full replacement via agricultural easements administered by land trusts or other non-profit entities.

It is not known at this time if all of the no-development buffer zone adjacent to the Placer Parkway would be viable for farmland, because of the potential for parcel splitting or other impacts on particular farm units such as the proximity of remnant parcels to overhead power lines or other constraints to continued farming. In addition, some of the land may be converted to non agricultural uses before Placer Parkway is implemented. SPRTA will participate in any fair share mitigation strategy that may be adopted by Placer and Sutter County Agricultural Commissioners or the respective counties. Because of the uncertainty over future conditions, and the level of fair share mitigation, if any, that may be adopted in the future, SPRTA has determined that this impact is not completely mitigated and a significant and unavoidable impact remains.

Other changes in the existing environment that could result in conversion of farmland to nonagricultural use include bisecting agricultural parcels. If the bisected parcels are no longer easily accessible or are too small for large-scale agricultural use, these parcels could be taken out of agricultural uses, or converted to small-scale agriculture if economically feasible. This is a potentially significant impact. Mitigation strategies could reduce the level of impact, but potentially not to a less-than-significant level. Therefore, this impact would remain significant and unavoidable.

Williamson Act Conversion

The project would convert between 119.85 (Alternative 1) and 243.70 (Alternative 2) acres of Williamson Act contracted lands, depending on the alternative selected (see Table 4.4-9). This would be a significant and unavoidable impact of the project because it would be a conversion of more than 100 acres. No feasible mitigation is identified to reduce this impact to a less-than-significant level.

Conflicts with Agricultural Plans or Policies

Conflicts with agricultural plans or policies would be a significant and unavoidable impact, and are addressed in Section 5.1, above. Similar to conflicts with land use plans or policies, the only potential mitigation strategy would be to amend applicable plan policies related to preservation of agricultural lands, which SPRTA has determined would not be feasible.

5.4 PUBLIC SERVICES AND UTILITIES

Information regarding public services and utilities is found in Section 4.5, and in the Community Impact Assessment (Mara Feeny & Associates and North Fork Associates, 2007) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.4.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts to public services and utilities, with implementation of identified mitigation strategies.

5.4.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Displacement or Disruption of Public Services and Utilities

During construction of Placer Parkway, the ability of emergency service providers, including fire responders and police, to meet response time goals could be temporarily affected by traffic delays on arterials that feed into the Parkway. These temporary construction impacts would be potentially significant. Mitigation strategies would be employed to reduce this impact to a less-than-significant level through coordinating with emergency services prior to and during construction, and by providing adequate access for emergency vehicles both during construction and operation. Overall emergency response time is anticipated to improve with the addition of Placer Parkway as a result of faster driving times along the Parkway route and reduced congestion on local roadways. Final design will include features to allow emergency turnaround routes along the Parkway for emergency providers. Since local access will be retained, emergency providers would still be able to cross over the Parkway in localized areas.

All build alternatives would affect the Reason Farms municipal facility, with impacts ranging from 96.0 acres (Alternative 5) to 108.9 acres (Alternative 2). None of the alignments would impact the retention aspects of

this facility. The City of Roseville is planning for and accommodating the Parkway corridor alignments in their planning process, so no disruption is anticipated. No mitigation is warranted.

The Western Placer Waste Management Authority sanitary landfill may be affected by the proposed project's interchange at Fiddymont Road. The area immediately west of the landfill has been identified as a landfill expansion area. Encroachment, if any, would affect approximately 5 to 6 acres of the southeastern corner of this property. The encroachment required for realignment of Sunset Boulevard West would reduce the useful life of the landfill expansion area; to what extent is not known and would depend on a variety of technical and operating parameters that would be identified closer to the time the landfill expansion facility would be planned and permitted. The existing landfill is expected to meet waste disposal needs to 2036 or 2045 (Golder Associates, 2005; Schwall, 2006), so it is likely that the expansion area would not be placed into use until after the Parkway interchange is completed, if it is approved. Impacts could be potentially significant. Mitigation strategies could include providing compensatory land, providing or participating in programs to reduce generation or increase diversion through new programs or new technologies, or contributing to infrastructure improvements that will eventually be needed to send materials off site. Given the magnitude of the impact and the long lead time available for planning minimization strategies, impacts to the facility are likely to be minor. With implementation of these mitigation strategies, impacts would be less than significant.

No other community facilities or services, such as schools or fire stations, would be directly affected by any of the corridor alignment alternatives. Therefore, there would be no impacts.

New Demand on Public Services or Utilities

The development of the proposed project would require the construction of new stormwater drainage facilities within the selected corridor, to manage stormwater runoff from the new roadway. Design of these new facilities would be incorporated into project plans, and at this time no expansion of existing facilities is expected to be required. Therefore, impacts would be less than significant. No mitigation is warranted.

The proposed project would generate some solid waste during construction. The project would comply with federal, state, and local requirements for the disposal of construction-related solid waste. Any hazardous materials that would be used during construction would be stored, used, and disposed of in accordance with applicable regulations for transport and disposal. Therefore, there would be no impact.

The proposed project would require nominal amounts of water during construction, and irrigation water for landscaping. This demand would be quantified when the landscaping plans are completed during final design. Since landscaping concepts for the project envision low-maintenance plantings, demand is not expected to be substantial. Impacts would be less than significant. No mitigation is warranted.

No wastewater would be generated by the project and therefore the project would not impact wastewater treatment facilities or require expansion of existing facilities. Therefore, there would be no impact.

Displacement or Disruption of Parks and/or Recreational Facilities

There are no parks within any of the corridor alignment alternatives. There would be no increase in the use of existing parks or recreational facilities associated directly with the Parkway. The planning for recreational facilities at the City of Roseville's Retention Basin site is proceeding in cooperation with the Parkway project, and no impacts are expected. Therefore, there would be no impact on parks.

5.5 VISUAL AND AESTHETICS

Information regarding visual impacts is found in Section 4.6, Visual Resources, and in the Visual Impact Assessment (URS, 2007h), which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.5.1 Significant and Unavoidable Impacts

The project would change the visual character and quality of the study area, and increase viewer sensitivity and exposure. Alternatives 1 and 2 would have the most visual impacts of all alternatives, with potentially Moderate/High impacts using FHWA visual impact criteria. These impacts would be potentially significant. Alternative 3 would have more impacts than Alternatives 4 and 5 and would be considered Moderate/High using FHWA visual impact criteria. Alternatives 4 and 5 would have potentially Moderate impacts, based on FHWA visual impact criteria. Mitigation strategies to reduce impacts would include project design to preserve the existing character as far as possible, and enable the project to visually complement its setting. Landscaping would be designed to respect the topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Species would incorporate native plants wherever possible, in accordance with Caltrans policy. Even with implementation of these mitigation strategies, because of the change in the visual character of the site and its surroundings, SPRTA has determined that this impact would remain significant and unavoidable.

5.5.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

There are no designated state scenic highways within the project vicinity. There are no eligible officially Designated State Scenic Highways within views of the study area. Therefore, no impact to a State Designated Scenic Highway is anticipated as a result of any of the alternatives.

No glare would result from the project because no buildings or structures with reflective coatings would be built. The project, by necessity, would include the installation of nighttime lighting fixtures, and the resulting night-time light is a potential significant impact on night-time views. Mitigation strategies include design considerations such as shielding lighting elements, using lower voltage lighting for planting areas, and proposing lighting fixtures that complement the visual character of the area. With implementation of these mitigation strategies, impacts would be less than significant.

5.6 CULTURAL RESOURCES

Information regarding cultural resources is found in Section 4.7, Historical Consulting, in the Archaeological Survey Report (URS, 2007b), in the Historical Resources Evaluation Report (JRP, 2007), and in the Historical Properties Survey Report (URS, 2007c), which are available at the locations identified in the Executive Summary, including the PCTPA web site.

5.6.1 Significant and Unavoidable Impacts

Historic Resources (Built Environment)

The Parkway could cause a substantial adverse change in the significance of a historic resource as defined in CEQA Guidelines §15064.5. Three properties warrant future formal evaluation as potentially representative examples of a type, period, or method of construction, or as works of a master. Reclamation District No. 1000 (RD 1000) is present in the study area, which is a National Register-eligible and California Registry of Historic Resources-eligible property. All build alternatives would

impact this property. A determination of effect by the State Historic Preservation Officer has not been made at this Tier 1 stage. SPRTA has determined that this is a potentially significant and unavoidable impact of the proposed project, because no feasible route that meets the need and purpose of the project has been identified that would not cross through RD 1000, and a determination of effect has not yet been made.

5.6.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Archaeological Resources

Based on this Tier 1 analysis, no known archaeological resources are present within the corridor alignment alternatives. Unknown archaeological resources that may be present in the study area could be adversely affected during construction. This could be a significant impact. The mitigation strategy identified would require that ground-disturbing activities within the vicinity of the resource encountered would be halted until a qualified archaeologist can evaluate the nature and significance of the find. This would reduce impacts to a less-than-significant level.

A significant impact would occur if the project disturbed previously unknown human remains during construction. The mitigation strategy identified in this event would require that ground-disturbing activities within the vicinity of the human remains encountered would be halted until a qualified archaeologist can evaluate the nature and significance of the remains, and the Sutter and/or Placer County Coroners and Departments of Museums would also be consulted. This would reduce impacts to a less-than-significant level.

Paleontological Resources

Based on this Tier 1 analysis, no known paleontological resources are present within the corridor alignment alternatives. Unknown paleontological resources that may be present in the study area could be adversely affected during construction. This could be a significant impact. The mitigation strategy identified in this event would require (1) preconstruction meetings to train construction workers about paleontological resources and notification procedures; (2) monitoring of construction areas contained geological units designated with a potentially Moderate or High sensitivity rating, and (3) collecting, preparing, identifying and curating significant fossil material into a state-designated repository. This would reduce impacts to a less-than-significant level.

5.7 TRAFFIC AND TRANSPORTATION

Information regarding traffic and transportation housing is found in Section 4.8, Traffic and Transportation, and in the Transportation Technical Report (DKS Associates, 2007), which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.7.1 Significant and Unavoidable Impacts

In 2020, the projected opening year of Placer Parkway, the project would affect traffic patterns and volumes on arterial and collector roadways in a broad area covering south Sutter County, southwest Placer County, and north Sacramento County. While some roadway segments near proposed interchanges would have increases in traffic volumes due to Placer Parkway, a larger number of roadway segments would have decreases in traffic volumes.

All build alternatives would result in similar but smaller changes in travel patterns in the Transportation Analysis Study Area (TASA) under Existing Plus Project conditions as would occur under 2020 conditions. That is, the build alternatives would:

- Increase traffic volumes on some roadway segments near proposed interchanges along the proposed project. These increases would likely be less than those under 2020 conditions.
- Result in decreases in traffic volumes on a larger number of local roadway segments southwestern Placer County and south Sutter County. These decreases would likely be less than those under 2020 conditions.
- Have a lower traffic volume on Placer Parkway than 2020 conditions.

A comparison between the No-Build Alternative and the build alternatives under 2020 conditions indicates that there would be significant level of service impacts on some roadway segments. These impacts are summarized below.

State Route 70/99

Under all build alternatives, Placer Parkway would add traffic to SR 70/99 between Interstate 5 (I-5) and Elkhorn Boulevard and would cause a significant impact on the level of service of this freeway segment.

SR 70/99 would operate at Level of Service (LOS) F conditions in 2020 between I-5 and Elkhorn Boulevard under the No-Build Alternative. All of the alternatives (with or without a potential interchange on the Parkway at Watt Avenue) would add traffic to SR 70/99 from I-5 to the Elkhorn Boulevard and thereby lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions.

Mitigation strategies, implemented individually or collectively, include decreasing the length of time spent in LOS F conditions during the morning and evening peak period by adding high occupancy vehicle lanes to SR 70/99 between Placer Parkway and I-5; constructing a controlled-access roadway parallel to SR 70/99 between Riego Road and Elkhorn Boulevard. The roadway could carry short to medium-range trips between future growth areas in south Sutter County and northern Sacramento County that would otherwise use SR 70/99; providing substantial transit services in the SR 70/99 corridor, including express bus services during commute periods and frequent all-day services from urban areas of Sutter and southwest Placer counties to the Natomas area and downtown Sacramento, and/or identifying “fair share” contributions for new development in portions of Sutter, Placer, and Yuba counties that would contribute traffic to SR 70/99 to help fund improvements to SR 70/99.

The growth in traffic demand on SR 70/99 will stem from development over a wide area. Traffic impact fees on this new development are a potential source of funding for improvements in the SR 70/99 corridor. To adequately spread the cost of improvements on a fair-share basis, a mechanism, such as a multi-jurisdictional Joint Powers Authority that covers portions of Sutter, Placer, and Yuba counties, would need to be established to collect fees and plan, design, and construct improvements. Because it is not certain that these mitigation strategies would be implemented for some time, or at all, SPRTA has determined that this impact remains significant and unavoidable.

State Route 65

Under all build alternatives, Placer Parkway would add traffic to SR 65 between Placer Parkway and the SR 65 Lincoln Bypass and would cause a significant impact on the level of service of this freeway segment.

SR 65 would operate at LOS F conditions in 2020 between Interstate 80 (I-80) and the SR 65 Lincoln Bypass under the No-Build Alternative. All build alternatives (with and without a potential interchange on the Parkway at Watt Avenue) would add traffic to SR 65 from the proposed Placer Parkway and the SR 65 Lincoln Bypass and thereby lengthen the period of time during the peak period where SR 65 would operate at LOS F conditions.

Mitigation strategies that, by themselves or in combination, could improve the level of service impacts on this segment of SR 65 to a less-than-significant level include widening SR 65 to six lanes between Placer Parkway and the SR 65 Lincoln Bypass; providing additional north-south capacity on local roadways parallel to SR 65; providing substantial transit services in the SR 65 corridor; and identifying “fair share” contributions for new development that would contribute traffic to SR 65 to help fund improvements to SR 65.

The growth in traffic demand on SR 65 will stem from development over a wide area. Traffic impact fees on this new development are a potential source of funding for improvements in the SR 65 corridor. SPRTA, which currently collects traffic impact fees for various improvements to regional roadways in South Placer County (called Tier 1 projects), has considered additional fees for a set of Tier 2 projects that would include improvements to SR 65 between Lincoln and I-80. Because it is not certain that these mitigation strategies would be implemented for some time, or at all, SPRTA has determined that this impact remains significant and unavoidable.

5.7.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Nonmotorized Transportation

Placer Parkway would be a controlled-access facility with interchanges or grade-separations at all existing or planned roadways along its route between SR 65 and SR 70/99. Thus it would not include bus turnouts or bicycle racks. The proposed Placer Parkway median is wide enough (100 feet) to accommodate future transit facilities that may be proposed. It could be readily designed to avoid direct impacts on existing and planned transit facilities, routes, or services. Placer Parkway would reduce traffic volumes on most local roadways, except for roadway segments near interchanges along Placer Parkway. Thus, the Parkway would generally have a positive impact on transit travel times in the TASA.

Placer Parkway would not directly remove or obstruct existing and planned bicycle facilities/bikeways. It would be a controlled-access facility with interchanges or grade-separations at all existing or planned roadways along its route between SR 65 and SR 70/99. This facility could be readily designed to avoid direct impacts on future bicycle facilities/bikeways. No impacts are identified.

5.8 AIR QUALITY

Information regarding air quality is found in Section 4.9, Air Quality, and in the Air Quality Technical Memorandum (URS, 2007a) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.8.1 Significant and Unavoidable Impacts

The project is considered to be a regionally significant project for air quality as defined in the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP).

Construction air quality impacts would be significant because under all build alternatives construction emissions would exceed the Placer County Air Pollution Control District (PCAPCD) and the Feather

River Air Quality Management District's (FRAQMD) construction emissions thresholds for reactive organic gases (ROG), oxides of nitrogen (NO_x), and particulate matter less than or equal to 10 microns (PM₁₀). Mitigation strategies identified to reduce impacts include preparation and implementation of a dust control plan; controlling dust and prevent dirt from going off site; controlling dust from inactive areas, unpaved roads, and adjacent public thoroughfares; providing air districts with a list of construction equipment and an anticipated construction timeline to identify whether potential additional restrictions would apply; maintaining construction equipment and vehicles in good condition; minimizing idling time for diesel-powered equipment and keeping idling time to 5 minutes or less; using alternative power sources where feasible; prohibiting open burning of removed vegetation; and strategic placement of trees near roadways. Even with these mitigation strategies, SPRTA has determined that impacts could remain significant and unavoidable during construction because it cannot be certain that construction air quality impacts would be reduced to a less-than-significant level.

All build alternatives would result in similar but smaller changes in air quality under Existing Plus Project conditions as would occur under 2020 conditions, which is the projected opening year of the Parkway. Impacts under 2020 conditions are described below.

All build alternatives would exceed the FRAQMD significance thresholds for ROG and NO_x. SPRTA has determined that this would be a significant and unavoidable impact of the proposed project. No feasible mitigation measures have been identified that would reduce these impacts to a less-than-significant level.

This analysis is tempered by the following: (1) as fuel and vehicle technology improves over the next decade, vehicle emissions increases can be expected to be lower than the projections presented in this analysis; (2) a reduction in traffic congestion would increase travel speed, which would reduce overall vehicle exhaust emissions (i.e., vehicle emissions are linearly correlated with travel speed); and (3) historical and current studies and testing of vehicles show that lower travel speed results in emission of Placer Parkway would reduce vehicle hours of delay within the TASA and Analysis Focus Area (AFA), and would alleviate traffic congestion, reduce travel time, and increase average travel speed, resulting in reduced emissions. While a detailed analysis of these factors would not occur until Tier 2, they are likely to reduce air quality impacts identified in this Tier 1 EIS/EIR.

5.8.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

All build alternatives would result in similar but smaller changes in air quality under Existing Plus Project conditions as would occur under 2020 conditions, which is the projected opening year of the Parkway. Impacts under 2020 conditions are described below.

None of the build alternatives would exceed the PCAPCD significance thresholds for criteria pollutants. All build alternatives would result in a less than 1 percent incremental increase in criteria pollutants over the No-Build Alternative, and differences among build alternatives are less than one-quarter of 1 percent. Alternative 1 and Alternative 3 would generate the least and most amount of pollutants, respectively. Hence, the implementation of Alternative 1 can be considered to have slightly fewer air quality impacts when compared with the other four build alternatives. Conversely, implementation of Alternative 3 would generate slightly more air pollutants and potentially create slightly greater air quality impacts than the other build alternatives.

The proposed project would not conflict or obstruct implementation of the Air Quality Attainment Plan (AQAP) as the project is included in the Regional Transportation Plan for Placer County, SACOG's MTP, and therefore conforms to the State Implementation Plan.

5.9 NOISE

Information regarding population and housing is found in Section 4.10, Noise, and in the Traffic Noise Analysis Technical Memorandum (URS, 2007g) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.9.1 Significant and Unavoidable Impacts

The project could result in exceedances of noise standards set by FHWA and Caltrans. The project could also result in exceedances of noise thresholds as specified in the Sutter and Placer County General Plans. This would be a significant impact.

All build alternatives would result in similar but smaller changes in the noise environment under Existing Plus Project conditions as would occur under 2020 conditions, which is the projected opening year of the Parkway. Impacts under 2020 conditions are described below.

The Parkway would result in a permanent increase in ambient noise levels in the study area above existing ambient noise levels. Under all build alternatives, several roadways would experience a 3 dB or greater increase in noise relative to existing (2004) levels attributable to higher traffic volumes. One roadway segment in the noise study area would experience relative noise increases of more than 12 dBA with the project. This location is at 18th Street, north of Elverta Road (location #107, as shown on Table 4.10-5). This would be a significant impact.

Mitigation strategies to reduce operational noise impacts include avoiding placing noise-sensitive receptors near the Parkway (which would be the responsibility of individual jurisdictions), operational noise abatement strategies such as altering the horizontal and vertical alignment of the project, construction of noise barriers, acquiring property to serve as a buffer zone, or acoustically insulating public use or nonprofit institutional structures. Since the future adjacent land uses in the area where the Parkway would be constructed are in flux, with many projects in the planning stage, it is not known whether the jurisdictional mitigation strategy would be implemented or if the other strategies would be completely effective in all locations. Therefore, SPRTA has determined that this impact remains significant and unavoidable.

5.9.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

The Parkway would have a substantial increase in temporary or periodic ambient noise levels in the study area during construction. During construction, standard construction noise controls would be implemented. Given the temporary nature of the construction, this would reduce impacts to a less-than-significant level.

5.10 HYDROLOGY

Information regarding hydrology is found in Section 4.11, Hydrology and Floodplains, and in the Hydrology and Floodplain Technical Memorandum (URS, 2007d) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.10.1 Significant and Unavoidable Impacts

There will be no significant and unavoidable impacts to hydrology with implementation of mitigation strategies.

5.10.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Increase in Impervious Surface Area Resulting in Increased Stormwater Runoff

All build alternatives would result in the construction of paved surface areas in the study area, thereby increasing stormwater runoff. Increased runoff could contribute to downstream flooding, and could exceed the hydraulic capacity of existing drainage facilities, resulting in localized flooding. As a consequence of vegetation removal during construction activities, stormwater runoff may be temporarily increased. Also, soil excavation and grading during construction could increase the risk of erosion and sedimentation of nearby water bodies. All build alternatives would increase impervious surfaces which would lead to potential increases in runoff, with Alternative 1 causing the most increase and Alternative 5 the least. The increase in impervious surface area would be a significant impact. Mitigation strategies include erosion controls and stabilization during and after construction, design of project features to avoid increasing flow velocities that may cause or contribute to downstream flooding, minimizing the potential for debris clogging that could cause flooding, structural runoff controls, best management practices (BMP), maximizing spans and minimizing piers/columns, maximizing the angle of stream crossings, consideration of Low Impact Development, and compliance with Federal Emergency Management Agency (FEMA) requirements regarding base flood elevations. These mitigation strategies would reduce impacts to a less-than-significant level.

Stream and Creek Crossings Affecting Downstream Hydrology

All build alternatives would require crossing creeks and streams, which may affect the hydrology of downstream segments. Crossings could affect hydrologic integrity and contribute to constriction or blockage of natural streamflow and/or natural streambed migration. They could result in modification of downstream natural flooding regime or reduction in downstream transport of sediment and nutrients. Alternatives 4 and 5 have the fewest stream crossings (12 crossings), while Alternative 1 has the most (18 crossings). Alternatives 4 and 5 cross Curry Creek, Pleasant Grove Creek, and tributaries to Orchard Creek. Alternatives 1, 2, and 3 cross these same creeks in different locations, but also cross Steelhead Creek. This would be a significant impact.

Maintenance of existing drainage patterns will be considered during final design to prevent substantial erosion or siltation. Mitigation strategies identified for increases in impervious area, identified above, would also be applicable to this impact. Other mitigation strategies identified include minimizing the number of stream crossings, minimizing flow modifications to streams, and mimicking the natural patterns as much as possible. In combination with standard conditions for siting and design of facilities and hydrologic modification employed by Sutter County, RD 1000, and Placer County Flood Control and Water Conservation District, these impacts would be reduced to a less-than-significant level.

Floodplain Encroachment

The proposed project would cross designated 100-year floodplain areas. Alternatives 4 and 5 would impact the most 100-year floodplain (21,600 linear feet; approximately 370 total acres), and Alternative 1 would impact the least (6,900 linear feet; 269 total acres). Impacts to floodplains include potential reduction of hydrologic integrity, reduction of beneficial floodplain values, and constriction or blockage of flows. Encroachment at creek crossings from fill placement or column installation within the floodplain could compromise creek capacity for conveyance of the 100-year flow and result in an increase in the base flood elevation and corresponding floodplain width upstream of the proposed crossing. In addition, increased flows due to increased impervious surfaces could also affect the floodplain. At some major creek crossings, sections of the Parkway would be elevated on a bridge. Bridges would be

designed such that the base of any new bridges within floodplains would be above the 100-year water surface.

Floodplain impacts would be potentially significant, but mitigation strategies described above would reduce impacts to a less-than-significant level.

5.11 WATER QUALITY

Information regarding water quality is found in Section 4.12, Water Quality, and in the Water Quality Technical Memorandum (URS, 2007i) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.11.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts on water quality, with mitigation.

5.11.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Stormwater Runoff Due to Increase in Impervious Surface Area, Resulting in Degradation of Water Quality

All build alternatives would result in the construction of paved surface areas in the study area, thereby increasing stormwater runoff. This would increase the potential for erosion during construction activities. Also, as a consequence of vegetation removal during construction activities, stormwater runoff may be temporarily increased. This would be a potentially significant impact. The project would comply with National Pollutant Discharge Elimination System (NPDES) permit requirements during construction, which would reduce the potential for violation of any water quality standards or waste discharge requirements.

Discharges of stormwater from the project rights-of-way, properties, facilities, and activities, including stormwater management activities in maintenance and operation of state-owned highways within the State of California, have been shown to be contributors of water pollutants. The quality and quantity of these discharges vary considerably and are affected by hydrology, geology, land use, season, and sequence and duration of hydrologic events. All build alternatives could discharge roadway runoff that may contain pollutants into streams and other sensitive sites, and would have the potential to result in substantial erosion or siltation through local alteration of existing drainage pattern. This would be a potentially significant impact.

The project would comply with NPDES permit requirements during maintenance and operation, which would reduce the potential for violation of any water quality standards or waste discharge requirements. Mitigation strategies include appropriate project design to avoid direct discharge, structural runoff controls, and incorporation of appropriate BMPs including appropriate detention and use of vegetative swales to provide opportunities for particulate and pollutant settlement. PCTPA would work with the Pleasant Grove Creek/Curry Creek Watershed Management Group and the Natomas Basin HCP staff during design phases of the project. These mitigation strategies would reduce impacts to a less-than-significant level.

The project would not substantially deplete groundwater supplies, as it would not use groundwater during either construction or operation. It would result in an increase in impervious surface related to the roadway pavement; however, runoff would be directed to adjacent unpaved surfaces in the median and

shoulders, and groundwater recharge would not be affected. This would be a less-than-significant impact. No mitigation is warranted.

Stream and Creek Crossings Affecting Water Quality

Stream crossings provide an opportunity for stormwater runoff that may contain pollutants to enter a waterway, affecting the water quality of downstream segments. Crossings may constrict or block natural streamflows that may result in erosion, and provide discharge point for pollutants to enter streams or creeks. There are some differences among the alternatives relative to the number of stream crossings and the amount of the watershed downstream of creek crossings (providing an indication on how much of the creek and watershed may be affected). Since mitigation strategies (as identified for the impacts of stream and creek crossings on downstream hydrology, identified in Section 5.10 above) would reduce impacts to a less-than-significant level, the differences among the alternatives do not change the conclusion on level of significance.

Discharge of Pollutants Into Sensitive Areas

The amount of wetland and vernal pool complex areas crossed could be indicative of the potential for pollutants to be discharged into sensitive areas. Canal crossings also would have this potential. The corridor associated with Alternative 1 traverses the largest amount of wetlands; Alternative 3 would traverse the largest amount of vernal pool complex areas; Alternative 5 would cross through the smallest amount of wetlands area; and Alternative 4 would traverse the smallest amount of vernal pool complexes. Although they would not cross through a large vernal pool complex area, Alternatives 3 and 4 would run nearby and upstream of approximately 6,000 feet of vernal pool complex area. This would be a potentially significant impact. Mitigation strategies related to stormwater runoff due to an increase in impervious surface area, described above, are applicable to this impact. These mitigation strategies would reduce impacts to a less-than-significant level.

5.12 SOILS, GEOLOGY AND SEISMICITY

Information regarding geology is found in Section 4.13.

5.12.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts to geology, with standard construction techniques and implementation of mitigation strategies.

5.12.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

The proposed project would result in some soil erosion and loss of topsoil associated with construction. In addition, there are localized areas with potential for subsidence and expansion. Erosion, subsidence and expansive soils could be a potentially significant impact. Standard construction techniques and the mitigation measures identified for reduction of erosion in Hydrology and Water Quality, would reduce this impact to a less-than-significant level.

No faults delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map are located within or in the vicinity of the study area. The study area is located in a seismically quiescent region, thus strong ground shaking due to future earthquakes is not anticipated. The likelihood of seismic-related ground failure is remote. Impacts would be less than significant. No mitigation is warranted.

No known mineral resources or known mineral resource recovery sites are known to exist or to be delineated within the study area, which is classified as MRZ-4. Therefore, no impacts would result.

5.13 BIOLOGICAL RESOURCES

Information regarding biological resources is found in Section 4.14, Biological Resources, and in the Natural Environment Study (URS, 2007f), which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.13.1 Significant and Unavoidable Impacts

Endangered, Threatened, Candidate, and Fully Protected Species and Their Habitat

The proposed project has the potential to affect seven special-status species: the vernal pool fairy shrimp, vernal pool tadpole shrimp, Valley elderberry longhorn beetle, Swainson's hawk, white-tailed kite, giant garter snake, and Boggs Lake hedge hyssop. The potential loss of individuals and of habitat would be a significant impact under all build alternatives. The degree of impact varies by species and habitat, by alternative, and is described in more detail in Section 4.14.3.3 and in Table 4.14-4.

Vernal Pool and Wetland Species

Vernal pool fairy shrimp, vernal pool tadpole shrimp, and Boggs Lake hedge hyssop are all vernal pool-dependent species, and each of the proposed build alternatives would directly impact this habitat. The area of habitat within the preservation corridor for each build alternative would range from a low of 106.7 acres for Alternative 4 to a high of 127.6 acres for Alternative 3. The mitigation strategy for vernal pool dependent species would be directed by principles set by the Placer County Conservation Plan (if implemented), *Eco-logical* (Brown, 2006) and/or the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (USFWS, 2005), which could include avoidance, minimization, or mitigation through in-lieu fee payment or acquisition of conservation lands. Implementation of the mitigation strategy would substantially lessen the impact of the loss of vernal pool habitat potentially utilized by these species; however, the impact would remain significant after mitigation. To the extent that replacement, re-creation or restoration of vernal pools can be implemented, this impact would be reduced; however, because the mitigation measure does not guarantee replacement of the affected habitat, this impact would remain significant.

Vernal Pools and Wetlands

Vernal pools and other federally protected wetlands would be significantly affected by each of the proposed build alternatives. The area of habitat that is within each of the corridor alignment alternatives is presented in Table 4.14-4, and range from a high of 167.3 acres under Alternative 2 to a low of 137.8 acres under Alternative 4. Mitigation for impacts to wetlands would be directed by principles set by the Placer County Conservation Plan (if implemented), and would include avoidance, minimization, or mitigation through in-lieu fee payment or acquisition of conservation lands. Implementation of these mitigation strategies would reduce non-vernal pool wetland impacts to a less-than-significant level.

Mitigation for vernal pool impacts associated with the Placer Parkway project (with or without the PCCP) would have two components: (1) habitat preservation, and (2) habitat creation. Habitat preservation in Placer County is complicated by the lack of habitat available that has not already been designated for conservation or development. Therefore, preservation in Placer County might not be possible if there are not suitable lands that can be acquired. If it is necessary to direct vernal pool preservation efforts outside of Placer County it may be difficult to satisfy the mitigation requirements because the preservation would not meet the goals of the USFWS recovery plan for vernal pool species or the goals of the PCCP. Habitat

creation in Placer County is possible, but creating habitat that meets the same functions as the affected habitat could be difficult. Vernal pools rely on a close relationship between upland habitats and small-scale hydrologic conditions. If a site does not have the right subsurface conditions (a seasonally perched groundwater table over a hardpan or claypan), it may be difficult to achieve the appropriate duration of ponding and therefore the vernal pool flora and aquatic fauna may not become established. Much of the land that is potentially available for vernal pool creation in western Placer County has been cultivated in the past which often disrupts the topography and the subsurface hydrology. To the extent that replacement, re-creation, or restoration of vernal pools would be feasible, this impact would be reduced. Implementation of the mitigation strategies would substantially lessen the impact of the loss of vernal pool wetlands. However, because the mitigation strategies do not guarantee replacement of the affected onsite vernal pools, SPRTA has determined that the impact would remain significant and unavoidable.

5.13.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Endangered, Threatened, Candidate, and Fully Protected Species and Their Habitat

Potential habitat for the Valley elderberry longhorn beetle, nesting or foraging Swainson's hawks and white-tailed kites, and giant garter snakes would also be significantly affected by all of the build alternatives. Table 4.14-5 in Section 4.14 of this Tier 1 EIS/EIR presents the area of potential habitat for each species that occurs within each corridor alignment alternative. Actual impacts to habitat would likely be smaller in area than the amount indicated in Table 4.14-5, but would likely still be significant, without mitigation. Mitigation strategies would be similar to those for vernal pool species, and would include additional measures described in the Natomas Basin Conservation Plan and existing guidelines set by the U.S. Fish and Wildlife Service and California Department of Fish and Game. These mitigation strategies would reduce impacts to a less-than-significant level.

Construction of the Parkway is unlikely to adversely affect steelhead or fall-run Chinook salmon, as these species are not likely to be present in the study area except for occasional transient occurrences via the two drainage canals. Crossings of major streams and drainage canals would be accomplished via bridges that would be constructed to avoid impedance of fish passage. Best management practices to control erosion and minimize degradation for water quality would be implemented during construction of the Parkway at the water crossings to protect aquatic habitats in the streams. Impacts would be less than significant. No mitigation is warranted other than mitigation identified for protection of water quality, which would also mitigate impacts to fisheries.

Riparian Habitat/Wetlands

The proposed project would have significant impacts on riparian habitat. Between 4.8 and 12.3 acres would potentially be affected, as presented in Table 4.14-5 in this Tier 1 EIS/EIR. Mitigation for impacts to riparian habitats would be directed by principles set by the Placer County Conservation Plan (if implemented), and would include avoidance, minimization, or mitigation through in-lieu fee payment or acquisition of conservation lands. If the PCCP were not adopted, mitigation strategies would include a combination of avoidance, minimization, and compensation. Compensation would include some combination of habitat preservation, restoration, and creation developed in coordination with federal, state, and local agencies. Compensatory habitat mitigation in the absence of the PCCP would be implemented according to the strategies outlined for Sutter County, above. The Placer Parkway project may contribute to the recovery effort identified in the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon through habitat protection and the establishment of conservation areas and reserves that will maintain or enhance species habitat values. Implementation of these mitigation strategies would reduce impacts to a less-than-significant level.

Tree Protection Ordinance

The proposed project could have significant impacts on trees protected under the Placer County Tree Preservation Ordinance in the vicinity of the Pleasant Grove Creek crossing. Impacts to protected trees would be mitigated by guidelines set forth in the preservation ordinance. This would include avoidance of protected trees where feasible, replacement in accordance with provisions of the ordinance, or payment of in-lieu fee as allowed by the ordinance. With implementation of this mitigation, impacts would be less than significant.

Conservation Lands

The project would impact a portion of the area covered by the Natomas Basin HCP. The project is not in conflict with this plan and would mitigate for all impacts as required by the plan. The proposed Placer County Conservation Plan is described in Section 4.14.1.3. Although the NCCP/HCP has not yet been adopted, PCTPA has requested and Placer County has agreed that the project would be a covered activity if this plan were adopted, and the project would abide by mitigation strategies identified in the plan. Impacts would be less than significant. No mitigation is warranted.

5.14 HAZARDOUS MATERIALS

Information regarding hazardous waste/materials is found in Section 4.15, and in the Initial Site Assessment (URS, 2007e), which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.14.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts to hazardous materials, with mitigation.

5.14.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

The proposed project would not create a significant hazard to the public or environment and would not require the routine transport, use, or disposal of hazardous materials within the study area. Hazardous materials that are stored or used in the corridor of the selected alternative would be removed prior to construction of Placer Parkway. During construction the use of some hazardous materials and generation of some hazardous waste would occur; however, the project would comply with all applicable regulations, and would not result in substantive impacts associated with transport, use, or disposal of hazardous materials. Impacts would be less than significant. No mitigation is warranted.

Hazardous materials are currently used and stored within the study area. It is anticipated that hazardous materials found in the selected corridor would be removed in accordance with all applicable regulations during initial phases of construction. Impacts would be less than significant. No mitigation is warranted.

Five potential Recognized Environmental Conditions (RECs) were identified within or adjacent to the build alternatives:

- An uncontrolled dump site in the Western Segment (Alternatives 1, 2, and 3);
- A second uncontrolled dump site in the Western Segment (Alternatives 4 and 5);
- The Tenco Tractor site (Alternatives 4 and 5);
- A third uncontrolled dump site in the Central Segment (all alternatives); and
- The Rio Bravo site in the Eastern Segment (all alternatives).

During construction, the potentially hazardous wastes associated with these RECs could be released in the environment. This would be a potentially significant impact. Mitigation strategies would include locating the roadway so that potential RECs would not be disturbed; testing soils for appropriate analytes and handling them in accordance with regulatory standards; and preparing and implementing a Health and Safety Plan prior to construction. This plan should describe appropriate procedures to follow in the event that any contaminated soil or groundwater is encountered during construction activities. Any unknown substances should be tested, handled, and disposed of in accordance with appropriate federal, state, and local regulations. With implementation of these mitigation strategies, impacts would be less than significant.

Trucks would use Placer Parkway. Some trucks and potentially other vehicles would likely be hauling hazardous materials. Accidents involving such vehicles could potentially result in the release of hazardous materials into the environment. The potential for this is similar to most existing facilities of a similar nature, and are not caused by the Parkway other than the fact that it would be in existence. Therefore, impacts associated with the release of hazardous materials into the environment would be less than significant. No mitigation is warranted.

The proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. The proposed project would comply with the policies and goals on wildlands and fire safety, outlined in Sutter, Placer, and Sacramento Counties' General Plans. As a result, the impacts are anticipated to be less than significant. No mitigation is warranted.

5.15 ENERGY

Information regarding energy is found in Section 4.16.

5.15.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts on Energy.

5.15.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Estimated fuel consumption does not substantially differ between build alternatives, or between the No-Build Alternative and the build alternatives. The operational fuel consumption of Alternative 3, which has the greatest projected number of vehicle miles traveled (VMT) of all build alternatives, and therefore the greatest fuel consumption, is only 1.9 percent greater than the No-Build Alternative. Furthermore, this Tier 1 analysis does not take into account the reduction in fuel use due to substantial reduction in congestion associated with all build alternatives; energy use under the build alternatives is likely overstated as compared to the No-Build Alternative. Impacts would be less than significant. No mitigation is warranted.

5.16 GROWTH

Information regarding growth is found in Section 6.1, and in the Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007), which is available at the locations identified in the Executive Summary, including the PCTPA web site. The project would not induce growth directly through construction of new homes or businesses, but it could be one of many factors that would encourage growth in and near the study area by extending and improving the regional transportation system. It is expected to influence the time of development in the vicinity of its proposed interchange locations, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development. No single alternative would be more growth-inducing than another (Mara Feeney &

Associates and North Fork Associates, 2007). The project includes components that would reduce this impact, such as minimizing the number of interchanges and establishment of a no-development buffer zone which would make it difficult to construct new interchanges in the future. However, no mitigation strategies have been identified to reduce this impact to a less-than-significant level. While its contribution to regional growth would be limited, SPRTA has determined that this impact would be significant and unavoidable.

5.17 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED AND SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

5.17.1 Significant Environmental Effects Which Cannot Be Avoided if the Proposed Project Is Implemented

The following significant environmental effects cannot be avoided if the proposed project is implemented:

Land Use:

- land use conversion;
- compatibility with proposed land uses;
- consistency with applicable General Plan policies;

Farmland:

- farmland conversion;
- Williamson Act conversion;
- conflicts with agricultural plans or policies;

Visual and Aesthetics:

- change in visual character and quality of the study area;

Cultural Resources:

- potential substantial adverse change in the significance of a historic resource;

Traffic and Transportation:

- addition of traffic on SR 70/99 (between I-5 and Elkhorn Boulevard), and on SR 65 (between I-80 and the SR 65 Lincoln Bypass), thereby lengthening the period of time during the peak period where these two freeways operate at LOS F conditions.

Air Quality:

- exceedance of FRAQMD operational emission thresholds for ROG and NO_x;
- construction emissions would exceed FRAQMD and PCAPCD thresholds for ROG, NO_x, and PM₁₀;

Noise:

- exceedances of noise standards set by FHWA and Caltrans, and exceedances of noise thresholds as specified in the Sutter and Placer County General Plans;

Biological Resources:

- potential to affect seven special-status species and their habitat: the vernal pool fairy shrimp, vernal pool tadpole shrimp, Valley elderberry longhorn beetle, Swainson's hawk, white-tailed kite, giant garter snake, and Boggs Lake hedge hyssop;
- potential loss of vernal pool species and their habitat;

Growth:

- one of many factors that would encourage growth in and near the study area by extending and improving the regional transportation system; and,

Cumulative Impacts.

Impacts related to the proposed project's cumulatively considerable contribution to (see Section 5.18):

- Land Use and Farmland – farmland conversion and Williamson Act conversion;
- Visual Resources – change in visual character and quality of the study area;
- Cultural Resources – potential adverse change in historic architectural resources;
- Traffic and Transportation –
 - Add traffic, in 2040, to SR 70/99 and thereby lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions (from I-5 to the proposed Placer Parkway);
 - Add traffic, in 2040, to SR 65 and thereby lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions (between I-80 and Lincoln Bypass);
 - traffic level of service impacts on Sierra College Boulevard between the future Valley View Parkway and English Colony Way; on Valley View Parkway, and on Whitney Ranch Parkway between SR 65 and University Avenue;
- Air Quality
 - Exceed FRAQMD significance thresholds for ROG and NO_x during operation;
 - Exceed PCAPCD significance thresholds for ROG (all build alternatives) and NO_x (all alternatives except Alternative 1)
 - Potential air toxic impacts (diesel particulates) could occur depending on the future roadway alignment within the selected corridor and the distance to existing/future sensitive receptors;

- Noise – increased noise related to vicinity development and associated roadway systems
- Hydrology – the combined effects of floodplain encroachment, loss of pervious surfaces, increased rates of runoff, and increased flooding;
- Water Quality – degradation of water quality when combined with upstream flow increases
- Biological Resources – habitat loss and fragmentation.

5.17.2 Significant Irreversible Environmental Changes Which Would Be Caused by the Proposed Project Should it Be Implemented

Land converted for use as the Placer Parkway would represent a significant irreversible environmental change which would be caused by the Parkway, since costs for reclaiming land should the transportation facility be abandoned at a future date would likely preclude reclamation of the land for its present use. Other environmental changes which would be irreversible include loss of agricultural lands including Williamson Act lands; change in the visual character and quality in the study area; change to RD 1000, an historic resource; increased traffic resulting in potential degradation of air quality and in increased noise in the study area; potential loss of potential special-status species and their habitat; and contribution to growth in the study area.

5.18 CUMULATIVE IMPACTS

Information regarding cumulative impacts is found in each section of Chapter 4, as well as in each Technical Study and Memorandum referenced above.

Chapter 3 characterizes the 2040 cumulative scenario in the study area against which potential cumulative environmental impacts have been evaluated. Each of the technical analysis sections in Chapter 4 includes a discussion of potential cumulative impacts associated with the project. This method of analysis satisfies both NEPA and CEQA requirements to evaluate the proposed project's contribution to the effect on the environment caused by the accumulation of past, present, and reasonably foreseeable projects. The discussion below presents a summary of these impacts and makes a conclusion pursuant to CEQA as to the significance of these impacts; impacts that were not cumulatively significant are not discussed.

Land Use and Farmland

The combined effects of farmland conversion and Williamson Act contract cancellation or nonrenewal could increase adverse impacts associated with individual projects, through the loss of agricultural resources or support services and increasing conflicts with urban development. This would be a cumulatively significant impact. All five alternatives would cross the Central Segment in a generally east-west direction, potentially intensifying the farmland fragmentation impacts and agricultural viability of farms affected by existing and planned high-capacity power lines in the western portion of the Central Segment, since these facilities are generally aligned in a north-south direction and can impede agricultural activities such as rice seeding or crop dusting.

As shown on Table 4.4-10 in Section 4.4, Farmlands, it is estimated that other anticipated urban development and roadway projects in the study area would convert 5,203 acres of Farmland of Statewide Importance, 1,429 acres of Prime Farmland, 6,687 acres of Unique Farmland, and 250 acres of Grazing Land. The converted farmland would also include nearly 717 acres of Williamson Act contracted land within Sutter and Placer counties, as shown in Table 4.4-11 in Section 4.4. Depending on the alternative, the project could impact between 676.46 and 990.06 acres of farmland and between 119.85 and

243.70 acres of Williamson Act contracted land. This could represent an incremental contribution to the cumulative conversion of designated farmland. This would be a significant cumulative impact of the project.

Visual

The project would change the visual character of the region. All build alternatives, in combination with other planned and proposed development in and near the study area, would contribute to a change in visual character and quality. By 2040, the study area will be more urbanized and will have changed from rural to urban/suburban, which will result in a cumulatively significant visual impact. Placer Parkway's incremental contribution to cumulative impacts related to planned/proposed development in the study area could be cumulatively considerable. This would be a significant cumulative impact of the project.

Cultural Resources

Cumulative impacts to historic architectural resources could be expected, given the substantial amount of planned and anticipated development that could occur within the study area. The proposed Sutter Point development lies within RD 1000, which would affect this resource. Potential cumulative impacts on historic architectural resources could occur as a result of acquisition of land and construction of any of the Parkway build alternatives in conjunction with other planned and proposed development within RD 1000. The Parkway's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

Traffic and Transportation

FHWA and Caltrans have requested that cumulative conditions for the transportation analysis of build alternatives be based on 2040 conditions, or 20 years beyond the projected opening of the Placer Parkway facility. A comparison between the No-Build Alternative and the build alternatives under 2040 conditions indicates that there would be a significant level of service impacts on some roadway segments. These impacts, which were based on the level of service policies of the jurisdiction or agencies that control each roadway, are summarized below.

State Route 70/99

SR 70/99 would operate at LOS F conditions in 2040 between I-5 and Riego Road under the No-Build Alternative. All of the build alternatives would add traffic to SR 70/99 from I-5 to the proposed Placer Parkway and thereby would lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions. Under Alternatives 4 and 5, Placer Parkway would connect to SR 70/99 farther north than under Alternatives 1, 2 and 3, and thus a longer stretch of SR 70/99 would be affected under those two alternatives. This would be a cumulatively significant impact.

Mitigation strategies identified for SR 70/99 in Section 5.7 above would be applicable to cumulative impacts as well. For the same reasons as described above (i.e., it is not certain that these mitigation strategies would be implemented for some time, or at all), the Parkway's contribution to this impact is cumulatively considerable. This would be a significant cumulative impact of the project.

State Route 65

SR 65 would operate at LOS F conditions in 2040 between I-80 and the SR 65 Lincoln Bypass under the No-Build Alternative. All build alternatives (with and without a potential interchange on the Parkway at Watt Avenue) would add traffic to SR 65 from the proposed Placer Parkway and the SR 65 Lincoln

Bypass and thereby would lengthen the period of time during the peak period where SR 65 would operate at LOS F conditions. This would be a cumulatively significant impact.

Mitigation strategies identified for SR 65 in Section 5.7 above would be applicable to cumulative impacts as well. For the same reasons as described above (i.e., it is not certain that these mitigation strategies would be implemented for some time, or at all), the Parkway's contribution to this impact is cumulatively considerable. This would be a significant cumulative impact of the project.

Fiddymment Road

The four-lane segment of Fiddymment Road north of Blue Oaks Boulevard would operate at LOS E conditions in 2040 under the No-Build Alternative. This would be a cumulatively significant impact.

Mitigation strategies include providing adequate lanes at the Fiddymment Road/Blue Oaks Boulevard and Fiddymment Road/North Hayden Parkway intersections; widening Fiddymment Road to six lanes between Blue Oaks Boulevard and the Roseville City limits; constructing an interchange on Placer Parkway at a future extension of Watt Avenue; and identifying "fair share" contributions for new development that would contribute traffic to Fiddymment Road to help fund improvements to Fiddymment Road. The impacts associated with constructing an interchange on Placer Parkway at a future extension of Watt Avenue are identified in Chapter 7.

The growth in traffic demand on Fiddymment Road will stem from development over portions of Roseville, Lincoln, and unincorporated Placer County. Traffic impact fees on this new development are a potential source of funding for improvements to Fiddymment Road. To adequately spread the cost of improvements on a fair-share basis, a mechanism would need to be established, such as a multi-jurisdictional Joint Powers Authority that covers portions of several jurisdictions. Placer County and the City of Roseville have established a Joint Powers Authority that covers portions of those jurisdictions to fund certain roadway improvements in West Placer County, including Fiddymment Road and Walerga Road. Because the build alternatives would reduce traffic at this location, the Parkway's contribution to the cumulative impact is not cumulatively considerable. Cumulative impacts would be less than significant.

Sierra College Boulevard

Under all build alternatives, Placer Parkway would add traffic to Sierra College Boulevard between the future Valley View Parkway (in the proposed Clover Valley area of the City of Rocklin) and English Colony Way. The segment of Sierra College Boulevard between Valley View Parkway and English Colony Way would operate at LOS D conditions in 2040 under the No-Build Alternative. This segment would operate at LOS E conditions under all build alternatives, and would cause a significant impact on the level of service of this roadway segment.

Mitigation strategies include providing adequate turn lanes at the Sierra College Boulevard/Valley View Parkway and Sierra College Boulevard/English Colony Way intersections, widening Sierra College Boulevard to six lanes between Valley View Parkway and English Colony Way, and identifying "fair share" contributions for new development that would contribute traffic to Sierra College Boulevard to help fund improvements to Sierra College Boulevard.

The growth in traffic demand on Sierra College Boulevard will stem from development over a wide area. Traffic impact fees on this new development are a potential source of funding for improvements to Sierra College Boulevard. SPRTA currently collects traffic impact fees for various improvements to regional roadways in South Placer County, including widening this section of Sierra College Boulevard to four lanes. Additional improvements to this section of Sierra College Boulevard could be incorporated into the SPRTA fees. Because it is not certain that this mitigation strategy would be implemented for some

time, or at all, the Parkway's contribution to this impact is cumulatively considerable. This would be a significant cumulative impact of the project.

Valley View Parkway

Under all build alternatives, Placer Parkway would add traffic to Valley View Parkway. Valley View Parkway (in the proposed Clover Valley area of the City of Rocklin) would operate at LOS C conditions in 2040 under the No-Build Alternative. This two-lane segment would operate at LOS D conditions under all of the build alternatives. This would be a cumulatively significant impact.

Mitigation strategies include providing adequate turn lanes at the Valley View Parkway/Sierra College Boulevard and Valley View Parkway/Park Drive intersections, widening Valley View Parkway to four lanes, and identifying "fair share" contributions for new development that would contribute traffic to Valley View Parkway to help fund improvements to Valley View Parkway. Because it is not certain that these mitigation strategies would be implemented for some time, or at all, the Parkway's contribution to this impact is cumulatively considerable. This would be a significant cumulative impact of the project.

Whitney Ranch Road

Under all build alternatives, Placer Parkway would add traffic to Whitney Ranch Parkway between SR 65 and University Avenue. Whitney Ranch Parkway would operate at LOS D conditions in 2040 between SR 65 and University Avenue in the City of Rocklin under the No-Build Alternative. This segment would operate at LOS F conditions under all of the alternatives.

Mitigation strategies include widening Whitney Ranch Parkway to eight lanes west of University Avenue, and identifying "fair share" contributions for new development that would contribute traffic to Whitney Ranch Parkway to help fund improvements to Whitney Ranch Parkway.

The growth in traffic demand on Whitney Ranch Parkway will stem from development in portions of the Cities of Rocklin and Lincoln as well as unincorporated Placer County. Traffic impact fees on this new development are a potential source of funding for improvements to Whitney Ranch Parkway. The City of Rocklin has development fees for roadway improvements. To spread the cost of improvements on a fair-share basis to portions of several jurisdictions, some mechanism, such as a multi-jurisdictional Joint Powers Authority, would need to be established. Because it is not certain that these mitigation strategies would be implemented for some time, or at all, the Parkway's contribution to this impact is cumulatively considerable. This would be a significant cumulative impact of the project.

Air Quality

The study area for the proposed project is located in the Sacramento Metropolitan Area (SMA), which is designated as severe non-attainment for the 8-hour average O₃ National Ambient Air Quality Standards. O₃ precursors include ROG and NO_x. Under cumulative conditions, incremental emissions associated with the proposed project would exceed the FRAQMD significance thresholds for ROG and NO_x. The proposed project would exceed the PCAPCD significance threshold for ROG and CO. Similarly, the proposed project would potentially exceed the PCAPCD significance threshold for ROG, and except for Alternative 1 would exceed the PCAPCD threshold for NO_x. This would be a significant cumulative impact of the project.

Potential air toxic impacts, especially related to diesel particulates, could occur depending on the roadway alignment within the selected corridor and its distance from existing/future sensitive receptors. This could be a significant impact. Because the precise location of the alignment in any of the corridor alignment alternatives cannot be determined at this time, and the precise layout and location of future

developments in the vicinity of the Parkway are not yet known, it is not possible to differentiate between build alternatives at the Tier 1 level of analysis with respect to air toxics. Therefore, the Parkway's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

Noise

Under cumulative conditions, increased development, including its roadway systems, would result in a cumulatively significant increase in noise. With up to more than 70,000 average daily trips on the Parkway, depending on the alternative selected, the project's contribution to cumulative noise impacts would be cumulatively considerable near the Parkway, at Parkway interchanges, and potentially at other locations where a change in traffic patterns caused in part by the project would result in more traffic. Because the Parkway would result in a permanent increase in ambient noise levels in the study area above existing ambient noise levels, the project's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

Hydrology

The combined effects of floodplain encroachment associated with multiple projects could exacerbate adverse impacts associated with individual projects, through cumulative loss of pervious surfaces and corresponding increase in the volume and rate of runoff due to reduced percolation of surface water. This also could lead to increased flooding risk as land throughout the area covered under the cumulative impact scenario is converted from pervious to impervious surface, and overall peak flow rates and runoff volumes are increased. Cumulative impacts can also be caused by acceleration of runoff caused by improved conveyance of stormwater through streets, gutters, and storm sewer facilities. The Parkway's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

Water Quality

The amount of impervious area associated with Placer Parkway would be roughly one square mile (ranging from approximately 0.98 square mile for Alternative 5 to approximately 1.2 square miles for Alternative 1). While this is a very small amount compared to the total area of the watersheds and the project's contribution to peak flows and volumes in the creeks would be expected to be small, when combined with potential upstream flow increases, the cumulative impacts could still be significant. The Parkway's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

The cumulative development scenario would result in development of a large portion of the study area and adjacent areas. This would result in an increase in impervious services and loss of water features such as streams, wetlands, and vernal pools. The combined effects of increased areas of impervious surfaces associated with multiple projects, with the potential for the paved roadway surfaces to carry increased runoff from the roadway to the study area streams, could exacerbate adverse water quality impacts associated with individual projects through a corresponding increase in the volume and rate of runoff due to reduced percolation of surface water. The Parkway's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

Biology

Placer Parkway would incrementally contribute to the projected loss of natural vegetation and sensitive natural communities within western Placer County, which would be a cumulative impact. Approximately 50,000 acres of development is currently planned or anticipated in the vicinity of Placer Parkway. The

Parkway would occupy approximately 500 to 600 acres¹ depending upon the alternative that is selected, approximately 1 percent of the total area that is anticipated for development in this portion of western Placer County. The additional development that is anticipated by 2040 would substantially reduce and fragment remaining habitats within western Placer County and south Sutter County. Habitat fragmentation would increase, with areas in the south and east of the study area being particularly affected. The Parkway would primarily be located within areas already proposed for future urban uses. Therefore, the potential for the Parkway to cause a cumulative increase in habitat fragmentation and isolation would be limited to those few areas where development would not be likely to occur except for the proposed Parkway. These areas are associated with proposed crossings of major streams that currently provide important habitat linkages.

Although the percentage of contribution of impacts from the Placer Parkway alternatives would be small compared to the overall impacts of the projects anticipated in western Placer County by 2040, the impacts on waters of the United States and associated vernal pool and riparian habitats may be important in the context of the amount of disturbance that has occurred historically in the area. For example, the U.S. Fish and Wildlife Service recovery plan for vernal pool species specifies the preservation of at least 85 percent of the remaining vernal pool habitat within western Placer County as the recovery goal (USFWS, 2005). As such, the cumulative contribution of the Placer Parkway to further reduction of these sensitive habitats is considered substantial. Areas of contiguous open space comprising agricultural land and pasture and undeveloped land would only remain within the north and west side of the study area following the development of the Parkway and other planned and proposed development in the study area. The remaining open space within the developed areas would be highly fragmented and therefore of significantly lower quality than what currently exists. There would likely be declines in the diversity of animal, plant and wildlife populations due to adverse effects of habitat fragmentation and isolation of remaining populations. Remaining habitat would be of less value than similar contiguous habitat.

The potential adverse impacts on sensitive biological resources associated with Placer Parkway are considered cumulatively considerable. The Parkway's contribution to cumulative impacts associated with habitat loss and habitat fragmentation would be a significant impact of the project.

5.19 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

To determine the environmentally superior alternative, all alternatives were evaluated with respect to their ability to avoid or substantially lessen significant environmental effects or provide meaningful differences in less-than-significant impacts, and their ability to meet the purpose and need for the project.

This analysis evaluates the No-Build Alternative, followed by the build alternatives. Build alternatives are considered in two ways. First, system-wide impacts—traffic, air quality, noise and energy—are evaluated. These are impacts that are a function of traffic movements, including vehicles miles traveled and vehicle hours of delay attributable to an alternative by virtue of where it connects to the State Routes and where other interchanges would occur. Such impacts have a broader impact that can be identified within a specific geographic segment, and extend beyond the project study area.

Second, the analysis considers impacts on environmental resources by geographic segment, where such impacts can be quantified. This is useful because it provides a clear focus on differences among alternatives: there are two alignments in the Western Segment, five alignments in the Central Segment, and one alignment in the Eastern Segment. This segment analysis therefore focuses on the differences between a SR 70/99 connection one-half mile north of Riego Road or at Sankey Boulevard, and differences among alternatives in the Central Segment.

¹ The developed area of the Placer Parkway corridor is estimated based upon an average developed highway corridor width of 312 feet and does not include the undeveloped areas at the outer margins in the proposed corridor.

5.19.1 No-Build Alternative

The No-Build Alternative would result in significant traffic congestion, and would not meet the purpose and need for the proposed project. It is estimated that the No-Build Alternative would result in slightly fewer VMTs than any of the build alternatives (less than 1 percent fewer in 2020 and less than 2 percent fewer in 2040). It would, however, result in substantially more vehicle hours of delay (VHD) in congested conditions as compared to the build alternatives, ranging from 3.34 to 6.07 percent in 2020 and from 5.24 to 6.98 in 2040 in the TASA, and from 10.19 to 24.04 percent in 2020 and from 15.62 to 20.67 in 2040 in the AFA.

Projected air quality under the No-Build Alternative would exceed air quality standards, but with smaller exceedances than the build alternatives when considering only VMT. It is likely that the increase in VHD as compared to the build alternatives would result in worse air quality conditions than those quantified in this Tier 1 level of analysis. Under the No-Build Alternative, energy would not be consumed during construction. During the more congested conditions expected in the future without the Parkway, energy consumption per vehicle would be expected to increase, in correlation with the greater VHD that would occur.

The No-Build Alternative would avoid many of the significant and unavoidable environmental impacts of the proposed project such as impacts on land use and farmlands; visual, cultural and biological resources; noise; and growth. Impacts that are cumulatively significant would remain significant with or without the Parkway. In particular, the assumed increase in VMT and VHD under the No-Build Alternative is in large part associated with the cumulative impact scenario.

5.19.2 System-Wide Impacts of Build Alternatives

For system-wide impacts, both opening year (2020) and cumulative year (2040) impacts are considered. This analysis focuses on significant impacts that cannot be mitigated below a level of significance.

Alternative 1 – the Red Alternative

Alternative 1 is the southernmost build alternative and would connect to SR 70/99 at the north of Riego Road interchange.

Alternative 1 would result in significant conversion of farmland, result in potential incompatibility with proposed land uses, conversion of lands under Williamson Act contracts, and inconsistency with applicable General Plan policies.

Alternative 1 would increase VMT over conditions without the project by 0.68 percent and 1.7 percent in 2020 and 2040, respectively. The increase in VMT among all build alternatives differs by less than one-quarter of 1 percent; Alternative 1 would have the smallest increase in VMT of all build alternatives. Alternative 1 would decrease VHD during LOS D, E, and F conditions without the project by 4.17 to 6.07 percent in the TASA and by 11.66 to 24.04 percent in the AFA, depending on the LOS and the analysis year. The decrease in VHD among all build alternatives ranges from 0.83 to 1.77 percent in the TASA, and from 0.65 to 3.16 percent in the AFA, depending on the LOS and the analysis year. Alternative 1 would have the largest decrease in VHD of all build alternatives.

In 2020, Alternative 1 would reduce traffic congestion on most local roadways as compared to the 2020 condition without the project. It would increase traffic congestion on SR 70/99 between I-5 and Elkhorn Boulevard and on SR 65 between Placer Parkway and the SR 65 Lincoln Bypass, contributing more traffic to those locations than would occur without the project. In 2040, Alternative 1 would contribute to a cumulatively significant impact on the following roadways: SR 70/99 between I-5 and Elkhorn

Boulevard; SR 65 between I-80 and the SR 65 Lincoln Bypass; Sierra College Boulevard between the future Valley View Parkway and English Colony Way; Valley View Parkway, and Whitney Ranch Road between SR 65 and University Avenue.

In 2020 and 2040, Alternative 1 would exceed the FRAQMD significance thresholds for ROG and NO_x; in 2040 Alternative 1 would exceed the PCAPCD significance threshold for ROG. It is the only alternative that would not exceed the PCAPCD significance threshold for NO_x in 2040. Alternative 1 would generate the least amount of criteria pollutant emissions, although differences among build alternatives are less than 2 percent.

Alternative 1 (along with the No-Build Alternative and Alternative 4) would have the fewest projected noise impacts in 2020, but not in 2040. It would have the lowest energy consumption in terms of estimated fuel consumption in both 2020 and 2040.

There is no substantive difference in growth inducement, resulting in secondary and indirect impacts, among the build alternatives.

Alternative 2 – the Orange Alternative

Alternative 2 would connect to the SR 70/99 at the north of Riego Road interchange and cross diagonally across the Central Segment of the study area. Alternative 2 would increase VMT over conditions without the project by 0.84 and 1.9 percent in 2020 and 2040, respectively. Alternative 2 would decrease VHD during LOS D, E, and F conditions over conditions without the project by 3.98 to 5.58 percent in the TASA and by 11.16 to 24.04 percent in the AFA, depending on the LOS and the analysis year. Impacts related to traffic congestion on local roadways and freeways would be similar to Alternative 1.

Air quality impacts under Alternative 2 would be similar to and slightly greater than Alternative 1. Noise impacts would be greatest under Alternative 2 (along with Alternative 3) in 2020 and 2040 (along with Alternatives 1 and 3). Alternative 2 would have the second highest energy consumption in 2020, and the third highest in 2040.

Alternative 3 – the Blue Alternative

Alternative 3, would connect to SR 70/99 at the north of Riego Road interchange and would cross the Central Segment north of the proposed Regional University and Community Specific Plan area. Alternative 3 would increase VMT over conditions without the project by 0.92 and 1.94 percent in 2020 and 2040, respectively. Alternative 3 would have the largest increase in VMT of all build alternatives. Alternative 3 would decrease VHD during LOS D, E, and F conditions over conditions without the project by 3.6 to 6.18 percent in the TASA and by 10.59 to 19.42 percent in the AFA, depending on the LOS and the analysis year. Impacts related to traffic congestion on local roadways and freeways would be similar to Alternative 1.

Air quality impacts under Alternative 3 would be similar to and slightly greater than Alternative 1. Alternative 3 would generate the greatest amount of air pollutant emissions among all build alternatives. Noise impacts would be greatest under Alternative 3 (along with Alternative 2) in 2020 and 2040 (along with Alternatives 1 and 2). Alternative 3 would have the highest energy consumption of all alternatives in both 2020 and 2040.

Alternative 4 – the Yellow Alternative

Alternative 4 would connect to SR 70/99 at the Sankey Road interchange and would cross the Central Segment north of the proposed Regional University and Community Specific Plan area. Alternative 4

would increase VMT over conditions without the project by 0.82 and 1.92 percent in 2020 and 2040, respectively. Alternative 4 would decrease VHD during LOS D, E, and F conditions over conditions without the project by 3.34 to 5.52 percent in the TASA and by 10.19 to 17.51 percent in the AFA, depending on the LOS and the analysis year. Alternative 4 would have the smallest reduction in VHD of all build alternatives. Impacts related to traffic congestion on local roadways and freeways would be similar to Alternative 1.

Air quality impacts under Alternative 4 would be similar to and slightly greater than Alternative 1. Alternative 4 (along with the No-Build Alternative and Alternative 1) would have the fewest projected noise impacts in 2020, and also in 2040 (along with Alternative 5). Alternative 4 would have the second lowest energy consumption in 2020, but the second highest in 2040.

Alternative 5 – the Green Alternative

Alternative 5 would connect to SR 70/99 at the Sankey Road interchange and would cross the Central Segment slightly to the north of Alternative 4. Alternative 5 would increase VMT over conditions without the project by 0.84 and 1.84 percent in 2020 and 2040, respectively. Alternative 5 would decrease VHD during LOS D, E, and F conditions over conditions without the project by 3.34 to 6.38 percent in the TASA and by 10.11 to 18.38 percent in the AFA, depending on the LOS and the analysis year. Impacts related to traffic congestion on local roadways and freeways would be similar to Alternative 1.

Air quality impacts under Alternative 5 would be similar to and slightly less than Alternative 4. Noise impacts would be greater than under Alternatives 1 and 4 in 2020 and the least in 2040 (along with Alternative 4). Alternative 5 would have the third lowest energy consumption of all alternatives in 2020, and the second lowest in 2040.

5.19.3 Impacts of Build Alternatives by Segment

This section considers impacts by geographic segment, for those resources where such impacts can be quantified. For this analysis, the existing plus project resource analyses were used. Use of existing plus project analyses provides a conservative estimate and acknowledges that it is infeasible to anticipate changes to the resources in 2040. This analysis focuses on significant impacts that cannot be mitigated below a level of significance. For some topics, these impacts are essentially the same for all alternatives. This is noted in the analysis below, which focuses on impacts which differentiate alternatives. In addition, the analysis also discusses impacts that can be mitigated to below a level of significance, where there are substantive impacts before mitigation.

Western Segment

In the Western Segment, all build alternatives would connect to SR 70/99 at one of two proposed locations. Alternatives 1, 2, and 3 are virtually identical in this segment, connecting at one-half mile north of Riego Road. Similarly, Alternatives 4 and 5 are also identical in this segment, connecting at Sankey Road.

Significant, unmitigable impacts related to compatibility with proposed land uses, consistency with applicable General Plan policies and agricultural plans and policies, and potential adverse change in the significance of a historic resource (RD 1000) would be essentially the same for all alternatives.

Several significant unmitigable impacts in the Western Segment differentiate between connections at Sankey Road versus those connecting at one-half mile north of Riego Road. Alternatives 1, 2, and 3 would convert almost twice as many acres of prime farmland and approximately 40 more acres of

Farmlands of Statewide Importance than Alternatives 4 and 5. The change in visual character and quality in the study area would be more pronounced under Alternatives 1, 2, and 3 than under Alternatives 4 and 5. Alternatives 1, 2, and 3 would have substantially greater impacts on biological resources than Alternatives 4 and 5. Alternatives 1, 2, and 3 would affect a 27 percent larger are of potential giant garter snake habitat (340.8 acres versus 268.2 acres for Alternatives 4 and 5); 40 percent more potential Swainson's hawk foraging habitat (85 acres versus 60.7 acres for Alternatives 4 and 5); and 160 percent more vernal pool complexes (23.1 acres versus 8.9 acres for Alternatives 4 and 5). Wetland impacts would be similar at 0.3 acre.

There are also substantive differences in the Western Segment in some impacts before mitigation would reduce them to less-than-significant levels. Alternatives 1, 2, and 3 would create fewer bisected parcels (11) as compared to Alternatives 4 and 5 (19), and would not impact existing residential communities, homes or farmsteads, or existing employment centers, while Alternatives 4 and 5 would affect the northern portion of a residential community between Pleasant Grove Road and the Union Pacific Railroad, approximately four homes or farmsteads, and one employment center associated with the relocation of Sankey Road. Since they are somewhat longer, Alternatives 1, 2, and 3 would result in approximately 40 percent more impervious surface in the Western Segment than would Alternatives 4 and 5, potentially having a greater effect on hydrology and water quality. As compared to Alternatives 4 and 5, Alternatives 1, 2, and 3 would result in 27 percent fewer acres in the 100-year floodplain and approximately twice as many acres in the 500-year floodplain. Alternatives 1, 2, and 3 would potentially impact one potential hazardous waste site of concern in the Western Segment as opposed to two such sites that would potentially be impacted by Alternatives 4 and 5.

Central Segment

Impacts within the Central Segment differ by alternative.

Significant, unmitigable impacts related to compatibility with proposed land uses, consistency with applicable General Plan policies and agricultural plans and policies, and change in the visual character and quality in the study area would be essentially the same for all alternatives.

Several significant unmitigable impacts in the Central Segment differentiate the build alternatives. Alternatives 1, 2, 3, 4, and 5 would convert from 672 to 903 acres of farmland to transportation uses, with Alternatives 4 and 5 converting the least (677 and 672 acres, respectively) and Alternative 1 converting the most (903 acres). Effects on farmland in the Central Segment by alternative are shown on Table 5-1. Overall, Alternatives 1 and 4 would have the least impacts on farmlands in the Central Segment.

**Table 5-1
Important Farmlands Affected in the Central Segment**

Alternative	Type of Important Farmland Affected (acres)			
	Prime	Unique	Statewide Importance	Williamson Act Lands
1	132	139	141	0
2	247	162	183	124
3	202	175	192	121
4	129	261	67	121
5	135	360	80	120

Alternatives 1, 2, and 3 would affect three residential properties that are potential historic resources in the Central Segment; none would be affected under Alternatives 4 and 5. In the Central Segment, all alternatives would have significant, unmitigable effects on biological resources, as shown on Table 5-2.

**Table 5-2
Biological Resources Affected in the Central Segment**

Alternative	Type of Biological Resource Affected (acres)						
	Riparian Habitat	Potential Giant Snake Habitat	Potential Swainson's Hawk/White-Tailed Kite		Potential Valley Elderberry Long-Horned Beetle Habitat	Vernal Pool Complexes	Wetlands Habitat
			Nesting Habitat	Foraging Habitat			
1	5.9	0	6.0	387	1.9	5.5	15.5
2	12.3	0	7.5	315	1.3	6.9	10.6
3	4.8	0	4.2	352	1.2	10.4	11.7
4	4.8	0	2.9	251	1.2	3.7	8.0
5	4.9	0	3.2	147	1.2	21.0	7.7

Alternative 4 would affect substantially fewer acres of vernal pool complexes, a dwindling resource receiving special attention by federal resources agencies. Alternatives 1 and 2 would have the most impact on biological resources in the Central Segment. Overall, Alternatives 4 and 5 would have the least impact on biological resources.

There are also substantive differences in the Central Segment in some impacts before mitigation would reduce them to less-than-significant levels. Alternative 1 would impact the northern portion of Country Acres, an existing residential community in the Central Segment. Alternatives 1, 2, 3, and 5 would bisect 8 to 10 parcels each; Alternative 4 would only bisect 4 parcels. Alternatives 3 and 4 would affect the fewest homes and farmsteads (two), while Alternative 5 would affect the most (five). All alternatives would encroach into the planned City of Roseville Retention Basin (96, 96, 87, 87, and 83 acres would be affected by Alternatives 1 through 5, respectively), although none would encroach within the planned flood retention features of this facility. The potential for archaeological impacts would be lowest for Alternative 5, followed in order by Alternatives 4, 3, 2, and then 1.

Alternatives 4 and 5 would result in the least amount of impervious area (80 and 78 acres, respectively), following by Alternatives 2, 3, and 1 (94 acres, 97 acres, and 103 acres, respectively). Therefore, as respects the amount of impervious surface in the Central Segment, Alternatives 4 and 5 would have the least effect on hydrology and water quality, and Alternative 1 the most. Alternative 1 would affect the least amount of 100-year and 500-year floodplains (46.6 and 14 acres, respectively), followed by Alternative 2 (79.2 and 25.9 acres, respectively), and Alternative 3 (94.4 and 25.9 acres, respectively). Alternatives 4 and 5 would have the most effect on floodplains, with Alternative 5 affecting slightly more acres in the 100-year floodplain (107 versus 105 for Alternative 4), and Alternative 4 affecting more of the 500-year floodplain (37.2 acres versus 27.8 acres). Alternatives 4 and 5 would cross two watersheds, while Alternatives 1, 2, and 3 would traverse three watersheds. Alternatives 4 and 5 would cross three streams, Alternative 3 would cross four streams, Alternative 2 would cross five streams, and Alternative 1

would cross nine streams. Alternative 1 would have the most potential impact on hydrology and water quality related to stream crossings both because of the number of streams crossed and because the angles of stream crossing are more longitudinal than the other alternatives, and hence less desirable from a floodplain perspective. Overall, Alternatives 4 and 5 would have fewer impacts on hydrology and water quality, and Alternative 1 would have the most.

Eastern Segment

The corridor alignment is the same for all build alternatives in the Eastern Segment. Therefore, all impacts would be the same.

5.19.4 Conclusion

The system-wide transportation, air quality, noise, and energy analyses are based upon forecasted VMT and, for traffic, vehicle hours of delay. The analysis indicates that all build alternatives would reduce the significant traffic congestion that would occur without the project on most local roadways in 2020 and in 2040. Alternative 1 would result in slightly fewer VMT and slightly more VHD, and would therefore be slightly preferred, although there is no clear preference among build alternatives with respect to traffic because the differences among them are not substantive. The increase in VMT among all build alternatives differs by less than one-quarter of 1 percent. The decrease in VHD among all build alternatives differs by less than 1 percent overall. Differences among build alternatives with respect to air quality are also not substantial, except that Alternative 1 would not exceed the PCAPCD significance threshold for NO_x in 2040. The No-Build Alternative and Alternatives 1 and 4 would have the fewest projected noise impacts in 2020, while Alternatives 4 and 5 would be quieter or need less mitigation in 2040.

The analysis by segment indicates a preference for alternatives connecting at Sankey Road (Alternatives 4 and 5) in the Western Segment, based on the lesser amount of significant unmitigable impacts on prime farmland and farmlands of statewide importance; visual impacts; and impacts on biological resources, including substantially fewer impacts on vernal pool complexes.

In the Central Segment, Alternative 4 would be preferred over other build alternatives, due to the lesser amount of significant unmitigable impacts on prime farmland and farmland of statewide importance; impacts to potential historic resources; and impacts to biological resources, again with the least impact on vernal pool complexes.

An examination of impacts before mitigation indicates that all alternatives would affect approximately a similar number of residential communities and homes. Alternative 1 would have the least impact on the 100-year floodplain. Alternatives 1, 2, and 3 would have the most impact on hydrology and water quality, with Alternative 1 having the most impacts and Alternatives 4 and 5 the least. Alternatives 1, 2, and 3 would potentially have a slightly greater impact on hazardous waste than Alternative 4 or 5.

Based on this analysis, the No-Build Alternative is the Environmentally Superior Alternative, except with respect to traffic, where it is substantially worse than all build alternatives. Among the build alternatives, Alternative 4 is the Environmentally Superior Alternative.