

Chapter 4

Environmental Consequences

This chapter describes the environmental consequences of the proposed action and alternatives relative to the physical, biological, and social parameters of the Plan Area. It describes the methods used to determine impacts and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany impact discussions.

Application of NEPA and CEQA Principles and Terminology

As described in Chapter 1, *Introduction*, and Chapter 2, *Proposed Action and Alternatives*, NEPA and CEQA require preparation of an environmental analysis to evaluate the potential environmental effects of proposed actions (and alternatives to those actions) that are subject to governmental approval. While many concepts are common to NEPA and CEQA, there are several differences between the two in terminology, procedures, environmental document content, and substantive mandates to protect the environment. For this EIS/EIR, the more rigorous of the two laws was applied in cases in which NEPA and CEQA differ. Table 4-1 compares NEPA and CEQA terminology.

Table 4-1. Correlated NEPA and CEQA Terminology

NEPA Term	CEQA Term
Environmental impact statement	Environmental impact report
Notice of intent	Notice of preparation
EPA filing/Federal Register notice and agency/public review (also known as a notice of availability)	Notice of completion/notice of availability
Record of decision	Notice of determination/findings/statement of overriding considerations
Cooperating agency	Responsible agency
Purpose and need; objectives and constraints	Project objectives
Proposed action and alternatives	Proposed project and alternatives
No action alternative	No project alternative
Environmental consequences	Environmental impacts
Affected environment	Environmental setting
Although none are specified in NEPA, CEQ regulations require an EIS to identify the direct and indirect effects “and their significance” (40 Code of Federal Regulations 1502.16)	Threshold of significance/significant impacts

This chapter is organized as follows.

- Section 4.1, *Agricultural and Forestry Resources*
- Section 4.2, *Air Quality, Greenhouse Gases, and Climate Change*
- Section 4.3, *Biological Resources*
- Section 4.4, *Cultural and Paleontological Resources*
- Section 4.5, *Hydrology and Water Quality*
- Section 4.6, *Land Use and Planning*
- Section 4.7, *Mineral Resources*
- Section 4.8, *Noise and Vibration*
- Section 4.9, *Population and Housing, Socioeconomics, and Environmental Justice*
- Section 4.10, *Recreation*
- Section 4.11, *Transportation and Circulation*

NEPA/CEQA Requirements

Each resource section of this chapter explains the methodology and significance criteria considered and discusses the environmental impacts and, where necessary, mitigation measures. Specifically, each section is organized as shown below.

- Environmental Consequences
 - Methods and Significance Criteria
 - Impacts and Mitigation Measures
 - Cumulative Impacts

Incorporation by Reference

CEQA and NEPA allow incorporation by reference of existing documents used to prepare each resource chapter. This EIS/EIR incorporates by reference information or analysis from several existing plans and supporting environmental documents that were developed concurrently with the PCCP planning process. As stipulated in the State CEQA Guidelines 15150(c), where an EIR uses incorporation by reference, the incorporated part of the referenced document shall be briefly summarized or described. Similar requirements are provided by NEPA (40 Code of Federal Regulations [CFR] 1502.21). The existing plans and supporting environmental documents that are incorporated by reference are listed below.

- *City of Lincoln General Plan* (City of Lincoln 2008a), *City of Lincoln General Plan Update: Draft Environmental Impact Report* (City of Lincoln 2006), *City of Lincoln General Plan Update: Draft Environmental Impact Report* (City of Lincoln 2007), and *City of Lincoln General Plan Update: Draft Environmental Impact Report* (City of Lincoln 2008b). These documents are available at this location: <http://www.lincolncalifornia.gov/city-hall/departments-divisions/community-development/general-plan-2050>

- *Placer County General Plan* (Placer County 2013a) and *Placer County General Plan Update: Countywide General Plan Final Environmental Impact Report* (Placer County 1994a). These documents are available at this location: <https://www.placer.ca.gov/departments/communitydevelopment/planning/documentlibrary/commplans/placer-county-gp>

City of Lincoln General Plan and EIR

The City of Lincoln prepared an EIR for its 2050 general plan. The general plan establishes a planning framework and policies for a 45-year planning period. Buildout of this general plan would include increases in acreage over the City's prior general plan. Low density residential for the primary residential use (7,610 acres). Commercial (including Neighborhood Commercial) land uses account for 2,300 acres, and Industrial (including Industrial Planned Development) land uses account for 2,900 acres. The Land Use and Circulation Diagram (including its assumptions related to building densities) consists of various land use designations and includes an estimated 13,130 acres of open space/agricultural land. An additional 1,530 acres parks and public designated land will be located in the City's planning area.

The Land Use and Circulation Diagram also includes several potential transportation improvements as well as identification of the location of various Villages and development areas. New residential areas are primarily proposed to occur in mixed use Villages that include an elementary school, Neighborhood Commercial, and Park as well as a variety of residential densities. The concept for the Villages is based on land use formulas that promote individual designs that are intended to embody features that encourage transit and pedestrian circulation.

The EIR identified the following impacts that would be significant after all mitigation is applied. All other impacts were considered to be reduced to a less-than-significant level by policies incorporated into the general plan (City of Lincoln 2008b).

- **Aesthetics:** Implementation of the Proposed Project would result in changes to the visual character of the City's proposed Sphere of Influence from a more agricultural/rural setting to one that is more characterized by suburban or urban uses (i.e., streets, homes, and neighborhood shopping centers), with increased light and glare sources. As a result, the following aesthetic impacts are considered significant and unavoidable:
 - OSC-11: The Proposed Project would substantially degrade the existing visual character or quality of the site and its surroundings.
 - OSC-12: The Proposed Project would have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
 - OSC-13: The Proposed Project would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.
- **Agricultural Resources:** With the implementation of the Proposed Project there would be a loss of the existing agricultural lands within the City's proposed Sphere of Influence. While the Proposed Project includes policies to minimize this impact, the following agricultural resource impact is considered significant and unavoidable:
 - LU-4: The Proposed Project could result in a substantial conversion of important farmland to non-agricultural uses.

- **Air Quality:** Construction activities associated with individual development projects in accordance with the Proposed Project would exceed local air quality district significance thresholds. While the Proposed Project includes policies to minimize this impact, the following air quality impacts are considered significant and unavoidable:
 - HS-4: The Proposed Project would result in a cumulatively considerable net increase of criteria pollutants. Future growth in accordance with the Proposed Project would exceed the daily PCAPCD thresholds for NO_x, ROG, CO, and PM₁₀.
 - HS-5: The Proposed Project would conflict with or obstruct implementation of an applicable air quality plan.
 - HS-6: Build-out of the Proposed Project would generate emissions above the daily PCAPCD significance thresholds for a variety of pollutants, primarily due to emissions related to increased traffic.
 - HS-7: The Proposed Project would expose sensitive receptors to substantial pollutant concentrations.
- **Biological Resources:** Development associated with implementation of the Proposed Project would contribute to the ongoing loss of natural and agricultural lands in the western Placer County area, which currently provide habitat for a variety of species. While the Proposed Project includes several policies to minimize this impact, the following biological resource impacts are considered significant and unavoidable:
 - OSC-3: The Proposed Project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.
 - OSC-4: The Proposed Project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
 - OSC-5: The Proposed Project would have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, etc.) through direct removal, filling, hydrological interruption, or other means.
 - OSC-6: The Proposed Project would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- **Hazards and Hazardous Materials:** Overall, most impacts associated with hazards and hazardous materials would be reduced to a less-than-significant level due to local, regional, State and federal regulations, such as those that control the production, use and transportation of hazardous materials and waste and control the location of incompatible land uses within an airport hazard area. While the Proposed Project includes policies to minimize a majority of these impacts, the following impact is considered significant and unavoidable:
 - HS-13: The Proposed Project could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- **Land Use and Planning:** Most land use incompatibility issues resulting from implementation of the draft General Plan would be mitigated by policies contained in the Land Use and Open Space Elements. However, the exceedance of PCAPCD air quality thresholds would result in a conflict with local and City of Lincoln General Plan Update regional air quality plans adopted for the purpose of mitigating an environmental (air quality) impact. The following impact is considered significant and unavoidable:

- LU-2: Development proposed in the draft General Plan could conflict with an adopted applicable land use plan, policy or regulation of an agency with jurisdiction over the project area adopted for the purpose of avoiding or mitigating an environmental effect.
- Noise: Future noise level increases related to the additional traffic resulting from the Proposed Project would result in significant noise impacts. While the Proposed Project includes several policies developed to minimize this impact, the following noise impacts are considered significant and unavoidable:
 - HS-15: The Proposed Project would result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
 - HS-16: The Proposed Project will result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- Public Services (including Recreation) and Utilities: Similar to any other development in areas of new growth, the construction of new facilities or the expansion of existing facilities may result in the permanent conversion of existing agricultural lands or other open space areas. While the Proposed Project includes several policies developed to minimize these environmental impacts, the following impacts are considered significant and unavoidable:
 - PFS-1: The Proposed Project would require or result in the construction of new water treatment facilities or expansion of existing facilities the construction of which could cause significant environmental effects.
 - PFS-5: The Proposed Project would require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
 - PFS-7: The Proposed Project could require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
 - PFS-15: The Proposed Project may require the construction or expansion of additional energy infrastructure facilities, the construction of which could cause significant environmental effects.
 - PFS-18: The Proposed Project would include fire protection/law enforcement facilities or require the construction or expansion of facilities which would have an adverse physical effect on the environment.
 - PFS-22: The Proposed Project would include community facilities or require the construction or expansion of facilities which could have an adverse physical effect on the environment.
 - PFS-11: The Proposed Project could place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- Open Space and Conservation
 - OSC-15: The Proposed Project would include recreational facilities or require the construction or expansion of recreational facilities which would have an adverse physical effect on the environment.

- Traffic and Transportation: The Proposed Project would result in significant and unavoidable impacts to several local and regional roadways. While the Proposed Project includes several policies developed to minimize these traffic and transportation impacts, the following impacts are considered significant and unavoidable:
 - The Proposed Project would result in a substantial increase in vehicular traffic on City of Lincoln roadways.
 - The Proposed Project would result in an increase in vehicular traffic on roadways in unincorporated Placer County.
 - The Proposed Project would result in a substantial increase in vehicular traffic on City of Rocklin roadways.
 - The Proposed Project would result in a substantial increase in vehicular traffic on Town of Loomis roadways.
 - The Proposed Project would result in a substantial increase in vehicular traffic on City of Roseville roadways.
 - The Proposed Project would result in a substantial increase in vehicular traffic on County of Sutter roadways.
 - The Proposed Project would result in a substantial increase in vehicular traffic on State Highways.

Placer County General Plan and EIR

The *Placer County General Plan* was adopted in August 1994 and last updated in May 2013. The 2013 update consisted of a targeted update of the countywide general plan in January 2012, which included ministerial changes, updates to policies and programs to be consistent with state law, and incorporation of Board of Supervisors adopted resolutions related to land use and circulation policies (e.g., Placer Parkway and the alignment of State Route [SR] 65). As stated in the general plan update, the update was intended to identify and revise language throughout the document that was out-of-date. Based on annual general plan implementation monitoring reports, implementation program schedules were updated. Changes mostly consisted of edits, corrections, and new figures. Goals, policies, standards, and implementation programs were revised to reflect current Placer County policy and practices and changes in State and federal laws since 1994. It did not include any specific development projects, and did not modify general plan land use designations, the land use map, or capital improvement program. Because the 2013 update did not change the land use diagram or the amount of growth that could result from the general plan, the EIR for the general plan is still the 1994 EIR. A negative declaration for the 2013 update was approved by the Board of Supervisors to comply with CEQA. Since 1994, there have been numerous land use changes approved by Placer County, but these have occurred through community plan updates and individual land owner applications. A separate environmental review was conducted for each of those actions.

Table 2-3 of the *Placer County General Plan* (included below as Table 4-2) presents estimates of the range of development that could occur under the countywide general plan and the community plans. These estimates are expressed in terms of the range of housing units and the maximum potential square footage in commercial and industrial designations. Maximum development potential is referred to as the *buildout holding capacity* because it reflects the amount of development that the land use designations would accommodate or “hold” if all of the land were developed or “built-out.” The actual level of development at buildout, however, will not reach the theoretical holding capacity. Most land will not develop at its maximum allowed intensity because of market forces,

parcel-specific site constraints, or because—for a variety of reasons—some property owners will simply not develop or sell their land for development. The table was updated for the 2013 update and is presented as Table 4-3. Although no land use designations were changed as a part of the 2013 update, acreages changed due to annexations, specific plan adoptions, individual land owner applications for general plan amendments, and the availability of more accurate GIS mapping in 2013 than in 1994.

Table 4-2. Holding Capacity of the General Plan (1994)

Land Use Designation	Acres	Minimum Lot Area		Dwelling Units per Acre		Max. FAR	Potential Lots		Total Potential Units		Potential Square Feet
		Min.	Max.	Min.	Max.		@ Min. Lot Area	@ Max. Lot Area	@ Min. DU/Acre	@ Max. DU/Acre	@ Max. FAR
10 Acre Agriculture	24,250.4	10	None	1 principal dwelling unit per lot		0.25	2,425	NIA	0	2,425	NIA
20 Acre Agriculture	32,810.2	20	None			0.25	1,641	NIA	0	1,641	NIA
40 Acre Agriculture	6,078.6	40	None			0.25	152	NIA	0	152	NIA
80 Acre Agriculture	63,081.6	80	None			0.25	789	NIA	0	789	NIA
Subtotal Agriculture	126,220.8						5,007		0	5,007	0
10 Acre Timberland	7,199.0	10	None	1 principal dwelling unit per lot		0.20	720	NIA	0	720	NIA
20 Acre Timberland	4,001.3	20	None			0.20	200	NIA	0	200	NIA
40 Acre Timberland	8,708.2	40	None			0.20	218	NIA	0	218	NIA
80 Acre Timberland	460,728.8	80	None			0.20	5,759	NIA	0	5,759	NIA
Subtotal Timberland	480,637.3						6,897	0	0	6,897	0
Low Density Residential	3,432.7	0.23	1.00	1	5	0.30	14,925	3,433	3,433	17,164	NIA
Medium Density Residential	992.4	0.08	0.23	5	10	0.70	12,405	4,315	4,962	9,924	NIA
High Density Residential	14.0	0.07	0.23	10	21	1.05	200	61	140	294	638,502
Rural Residential	26,791.2	1.00	10.00	0	1	0.30	26,791	2,679	0	26,791	NIA
Subtotal Residential	31,230.3						54,321	10,488	8,535	54,173	638,502
Business Park/Industrial	2,046.6	0.23	100	0	0	1.80	8,898	NIA	0	0	160,469,813
General Commercial	124.3	0.11	NIA	21	21	2.00	1,130	NIA	2,610	2,610	10,829,016
Tourist Commercial	129.7	0.14	0.46	11	21	0.80	926	282	1,427	2,724	4,519,786
Subtotal Commercial/Industrial	2,300.6						10,954	282	4,037	5,334	175,818,615
Open Space	1,006.3	5	5	0	0	0.02	201	103	NIA	0	NIA
Recreation	768.0	1	160	1	1	0.30	768	24	NIA	768	NIA
Subtotal Open Space/Recreation	1,774.3						969	127	0	768	0
SUBTOTAL	642,163.3						78,148	10,897	12,572	72,179	176,457,117
Community Plan Areas	213,750.0	See Community Plans for applicable standards								135,150	NIA
Total Unincorporated	855,913.3									208,097	NIA
Cities	46,139.9	See applicable City Plans									
TOTAL COUNTY	902,053.2										

Source: Placer County 1994b.

Table 4-3. Holding Capacity of the General Plan (2013)

Land use Destination	Acres	Minimum Lot Area		Dwelling Units per Acre		Maximum Non-Res. FAR	Potential Lots		Total Potential Units		Square Feet @ Max. FAR
		Min.	Max.	Min.	Max.		@ Min. Lot Area	@ Max. Lot Area	@ Min. DU/Acre	@ Max. DU/Acre	
10 Acre Agriculture	23,037.9	10	None	0	0.1	0.25	2,304	NA	-	2,304	NA
20 Acre Agriculture	29,100.1	20	None	0	0.05	0.25	1,455	NA	-	1,455	NA
40 Acre Agriculture	5,973.0	40	None	0	0.025	0.25	149	NA	-	149	NA
80Acre Agriculture	51,967.3	80	None	0	0.0125	0.25	650	NA	-	650	NA
Subtotal Agriculture	110,078.3						4,558		0	4,558	0
10Acre Timberland	7,561.5	10	None	0	0.1	0.2	756	NA	-	756	NA
20 Acre Timberland	4,851.5	20	None	0	0.05	0.2	243	NA	-	243	NA
40 Acre Timberland	9,026.3	40	None	0	0.025	0.2	226	NA	-	226	NA
80Acre Timberland	409,501.1	80	None	0	0.0125	0.2	5,119	NA	-	5,119	NA
Forestry (20-160 Acre Min.)	1,609.7	20	None	0	0.05	0.2	80	NA	-	80	NA
Subtotal Timberland	432,550.1						6,424		0	6,424	0
Low Density Residential	719.1	0.23	1	1	5	0.3	3,127	719	719	3,596	NA
Medium Density Residential	822.6	0.08	0.23	5	10	0.7	10,283	3,577	4,113	8,226	NA
High Density Residential	16.7	0.07	0.23	10	21	1.05	239	73	167	351	763,825
Rural Residential	21,783.1	1.00	10	0	1	0.3	21,783	2,178	0	21,783	NA
Subtotal Residential	23,341.5						35,431	6,547	4,999	33,955	763,825
Business Park/Industrial	944.3	0.23	None	0	0	1.8	4,106	NA	-	-	74,040,674
General Commercial	148.4	0.11	None	21	21	2	1,349	NA	3,116	3,116	12,928,608
Tourist Commercial	10.0	0.14	0.46	11	21	0.8	71	22	110	210	348,480
Tourist/Resort Commercial	147.7	0.14	0.46	11	21	0.8	1,055	321	1,625	3,102	5,147,050
Subtotal Commercial/Industrial	1,250.4						6,581	343	4,851	6,428	92,464,812
Open Space	1,043.0	5	None	0	0	0.02	209	NA	-	-	NA
Public/Quasi-Public	56.2	1	None	1	1	0.3	56	NA	56	56	NA
Resorts and Recreation	809.6	1	None	1	1	0.3	810	NA	810	810	NA
Water Influence	55,579.4	4.6	None	0	0	0.02	12,082	NA	-	-	NA
Water Influence/Private Ownership	1,877.5	4.6	None	0	0	0.02	408	NA	-	-	NA
Subtotal Open Space/Recreation	59,365.7						13,565.0		865.8	865.8	0
Specific Plan/Special Study Area	1,177.1	See Regional University Specific Plan									
Subtotal Open Space/Recreation	1,177.1										
SUBTOTAL	627,763						66,558	6,889	10,716	52,231	93,228,637
Community Plan Areas	270,366	See applicable Community Plans									
Total Unincorporated	898,129										
Cities	62,641	See applicable City General Plans									
TOTAL COUNTY	960,770										

Source: Placer County 2013a.

As stated in the final EIR for the *Placer County General Plan* (Placer County 1994b):

This EIR uses two long-term planning scenarios to analyze the impacts of growth and development in Placer County under the Placer County General Plan: 2010 (just under 20 years into the future) and 2040 (about 50 years into the future). A 20-year time horizon is a reasonable long-term benchmark for most planning analyses. The implications of large amounts of development potential may, however, not be evident within the 20-year period, so the 2040 perspective is helpful for assessing the longer-term, cumulative effects of development. The year 2040 has been adopted as the official long-term planning horizon for state demographic projections and other related studies (e.g., for transportation and air quality planning). Nonetheless, the County acknowledges that analysis based on 50-year development projections is highly speculative and that technological changes and other factors may significantly alter the characteristics of growth and development and the systems to serve that development.

The EIR found that in eight major areas the general plan, taken as a whole, will result in potentially-significant or significant adverse impacts. All other impacts were considered to be reduced to a less-than-significant level by policies incorporated into the general plan.

- Land use.
- Traffic congestion.
- Cultural resources.
- Loss of farmland.
- Loss of agricultural production.
- Habitat conversion and habitat quality reduction.
- Increase in air pollutant emissions.
- Traffic noise.

The EIR summarizes these impacts as presented below.

- **Land Use:** The *General Plan* will result in changes to existing land use in the unincorporated area of Placer County. According to the *State CEQA Guidelines*, a project can result in adverse environmental impacts relating to land use if it has the potential to substantially alter the existing or planned land use of an area. Since development under the *Land Use Diagram* would result in changes to the existing land use pattern, the *General Plan* would result in a potentially significant adverse impact. There are no available measures to mitigate this impact.
- **Traffic Congestion:** Development under the *General Plan* with all roadway improvements identified under the "2010 Mitigated Transportation System" would result in traffic levels of service on some roadway segments that exceed the *Policy Document's* level of service standards. Assuming all the transportation improvements outlined under the "2010 Mitigated Transportation System" are implemented by 2010, the *General Plan's* level of service standards would be met on all the non-state highways in the unincorporated areas of the county. Projected 2010 population and employment levels under the *General Plan* (including estimated growth in the incorporated areas of the county and growth in the rest of the metropolitan area) would result, however, in traffic volumes that would exceed level of service standards on some state highways as well as on some roadways in the incorporated areas of the county. Exceedance of service levels adopted as County policy is considered a significant, adverse impact. About 4.8 percent of the "lane miles" on the county's roadway system would operate at LOS "F" conditions during peak hours on an average weekday, nearly all of which would occur on state highways.

The standards, policies, and programs of the *Policy Document* would provide acceptable levels of service in 2010 on the roadways that are under Placer County's jurisdiction. Additional mitigation, however, would be needed for some state highway segments and some roadways within incorporated areas to operate at acceptable levels of service. Potential mitigation measures to resolve the anticipated 2010 congestion levels, as well as accommodate travel growth beyond 2010, could involve a variety of multi-modal solutions in the I-80 corridor. This includes transit, high occupancy vehicle (HOV) lanes, and/or transportation demand management (TOM) measures within Placer County as well as Sacramento County. The *General Plan* calls for the County to participate in a multi-modal study of the I-80 corridor that will explore improvements to passenger rail service and HOV facilities. It is unknown whether such a study could result in improvements that would mitigate the impacts of the *General Plan*. There are, therefore, no feasible mitigation measures that the County can undertake to reduce this impact to a less-than-significant level.

- **Cultural Resources:** The cumulative effect of increased development, and thus human population and associated activity, could result in occasional accidental disruption and adverse effects on unidentified important archaeological, historic, or paleontological sites, in spite of the County's best efforts, as expressed in the *General Plan* policies and programs. The cumulative impact of development permitted under the *General Plan* is, therefore, unavoidable. This impact is considered potentially significant. No feasible mitigation measures beyond the policies and programs included in the *Policy Document* are available that would reduce the possibility of occasional accidental disruption of important archaeological, historic, or paleontological sites to a less-than-significant level.
- **Loss of Farmland:** Development under the *General Plan* would result in the direct conversion of 3 percent of the county's total farmland by 2010 and the potential conversion of an additional 13 percent. This includes the direct conversion of 5.3 percent of the county's prime farmland and farmland of statewide importance and the potential conversion of an additional 4.4 percent. The direct and potential conversion of prime farmland is considered a significant adverse impact. While the *Policy Document* includes numerous policies to preserve designated agricultural areas and to minimize conflicts with adjacent uses, there are no feasible measures that would mitigate for the loss of prime farmland to a less-than-significant level.
- **Loss of Agricultural Production:** Direct conversion of farmland as a result of development under the *General Plan* could result in the decline in the annual gross agricultural production value in the county. This would include a loss of 64 percent of the annual gross production value of fruit and nut crops in the county by 2010. This impact would occur primarily as a result of conversion of land suitable for the production of these crops in the foothill region. While this impact would be reduced by implementation of the policies and programs of the *Policy Document*, there are no feasible measures that would mitigate this impact to a less-than-significant level.
- **Habitat Conversion and Habitat Quality Reduction:** This *EIR* assesses vegetation and wildlife habitat impacts resulting from two types of development: urban and suburban/rural residential. In both cases, the assessment concludes that the impacts of development under the *Land Use Diagram* would be significant.
 - Development under the *General Plan* would cause substantial habitat conversion in areas of the unincorporated county designated for urban uses. Such development through the year 2010 would eliminate approximately 7,200 acres (5 percent) of the unincorporated county's Urban, Agricultural, and Rangeland (UAR) vegetation community and its associated natural habitat. Urban development would also eliminate approximately 3,000 acres (10 percent) of the unincorporated county's Grassland vegetation community and its associated natural habitat.
 - Development in designated suburban and rural residential areas under the *General Plan* would also cause substantial habitat conversion and habitat quality reduction. Such development through the year 2010 would affect approximately 42,000 acres (28

percent) of the unincorporated county's UAR vegetation community and its associated natural habitat, 2,000 acres (7 percent) of the Grassland vegetation community, 4,000 acres (14 percent) of the Oak Woodland vegetation community, and 47,000 acres (10 percent) of the Conifer Forest vegetation community.

- The adverse impact to vegetation and wildlife associated with habitat conversion is significant because such conversion could substantially affect special-status species or affect state or federal threatened and endangered species, and could result in a substantial conversion of natural vegetation communities, a substantial reduction in the diversity or numbers of associated fish, wildlife, and plant species, and could have a significant effect on associated rare natural plant communities and significant natural areas in designated suburban and rural residential areas and within and around new urban development.
- While policies and programs of the *Policy Document* would partially mitigate the effects of habitat loss, they would not reduce this impact to a less-than-significant level. Furthermore, no mitigation measures are available that would reduce the impact of development under the *General Plan* to a less-than-significant level.
- Increase in Air Pollutant Emissions: Development under the *General Plan* would result in substantial increases in nitrogen oxide (ozone precursor) and PM10 emissions that would result in violations of ambient air quality standards. While the *Policy Document* includes numerous policies and programs to reduce the effects on air quality, there are no measures available that would reduce this impact to a less-than-significant level.
- Traffic Noise: Development under the *General Plan* would result in an increase in traffic noise levels. Increased noise levels associated with traffic could encroach upon existing noise-sensitive land uses that currently are not exposed to traffic noise levels in excess of *Policy Document* standards. No mitigation measures beyond the policies and programs included in the *Policy Document* are available that would reduce the potential future noise impacts on existing noise-sensitive uses to a less-than-significant level.

Approach to Assessment of Environmental Consequences of the Proposed Action/Proposed Project

Methods for Impact Analysis

Each section of this chapter includes a description of the resource-specific methodology used to identify and assess the potential environmental impacts that would result from implementation of the proposed action or alternative actions.

Significance Criteria

Significance criteria identified in each section of this chapter describe thresholds of significance and other criteria to determine the significance of impacts. The thresholds and criteria for determining the significance of impacts for this analysis are based on the Environmental Checklist in Appendix G of the State CEQA Guidelines and other resource-specific sources as described in each section; these thresholds and criteria are used for both the NEPA and CEQA analyses in this EIS/EIR. The thresholds and criteria derived from the checklist have been modified as appropriate to meet the circumstances of the alternatives (23 California Code of Regulations [CCR] Section 3777 [a][2]).

Impacts and Mitigation

Impact Analysis and Determination

Each section of this chapter includes an evaluation of the direct and reasonably foreseeable impacts associated with implementation of the proposed action and alternatives. Under NEPA, the purpose of an EIS is to describe and disclose the impacts of the alternatives. Under CEQA, however, the significance of the impact needs to be described. A significant impact on the environment is defined as a substantial, or potentially substantial, adverse change in the environment (Public Resources Code [PRC] Section 21068). Therefore, to facilitate both CEQA and NEPA reviews, this chapter documents and describes potential resource-specific impacts, including thresholds of significance (to satisfy CEQA), mitigation that would reduce significant impacts, and a statement of each impact's significance before and after mitigation. The potential impact findings used in this document are defined below.

- **No Impact.** This impact would cause no discernible change in the environment as measured by the applicable significance criteria; therefore, no mitigation would be required.
- **Less than Significant.** This impact would cause no substantial adverse change in the environment as measured by the applicable significance criteria; therefore, no mitigation has been identified.
- **Significant.** This impact would cause a substantial adverse change in the physical conditions of the environment. Impacts determined to be significant based on the applicable significance criteria fall into two categories: (1) those impacts for which there is feasible mitigation available that would avoid or reduce the environmental impacts to less-than-significant levels, and (2) those impacts for which there is either no feasible mitigation available or for which, even with implementation of feasible mitigation measures, there would remain a significant impact on the environment. Those impacts that cannot be reduced to a less-than-significant level by mitigation are identified as significant and unavoidable.
- **Significant and Unavoidable.** This impact would cause a substantial adverse change in the environment and cannot be avoided or mitigated to a less-than-significant level if the proposed action is implemented. Even if the impact finding is still considered significant with the application of mitigation, the applicant is obligated to incorporate all feasible measures to reduce the severity of the impact.

Throughout this EIS/EIR, impacts are identified as *temporary* or *permanent* direct effects. Direct effects are caused by the action and occur at the same time and place (40 CFR 1508.8). These terms apply differently to different resources and are defined, where relevant, in each individual resource section. In some cases, impacts are treated as direct and permanent even though the impact mechanism (e.g., earthmoving) would end once construction ends. For temporary impacts on terrestrial biological resources that would end following construction, activities are treated as direct and permanent impacts for the purposes of impact analysis if the effects persist for more than 1 year. Such a definition represents a conservative characterization of the impact. For other resources, however, such as noise, when construction ceases, so do related impacts associated with construction. In these cases, impacts are characterized as direct and temporary.

Impacts are also characterized as *indirect*. Indirect impacts are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Indirect

impacts are a secondary consequence of activities that may occur later in time or are farther removed in distance from the direct effects of the activities.

Chapter 5, *Other Required CEQA and NEPA Analyses*, addresses significant irreversible and irretrievable changes, short-term uses versus long-term productivity, selection of the environmentally superior alternatives, and a summary of significant and unavoidable impacts under CEQA.

Mitigation Measures

Specific measures are proposed in this EIS/EIR, when necessary, to avoid, reduce, minimize, or compensate for adverse environmental effects of the proposed action or action alternatives. The term *mitigation* is described for each resource and designates measures required to reduce residual environmental impacts after considering the application of all conservation measures and avoidance and minimization measures included in the PCCP. Because future development under the Placer County and City of Lincoln's general plans is a component of the Covered Activities, the effects of each Covered Activity are assessed using the EIRs for those general plans. As described above, the general plan EIRs are incorporated by reference in this document, including mitigation measures identified in the general plan EIRs to reduce impacts identified in those EIRs. These mitigation measures are expected to apply to all Covered Activities under the action alternatives unless otherwise noted. Activities performed by South Placer Regional Transportation Authority (SPRTA) and the Placer County Water Agency (PCWA) would not be subject to the general plan EIR mitigation measures unless such activities were subject to the land use authority of the County.

Mitigation is also presented to meet CEQA's specific requirement that, whenever possible, agency decision-makers adopt feasible mitigation to reduce a project's significant impacts to a less-than-significant level. Although NEPA does not impose a similar procedural obligation on federal agencies as CEQA requires, the practice to adopt feasible mitigation whenever possible to reduce a project's significant impact is consistent with NEPA's intent that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated.

Mitigation measures included in this EIS/EIR are considered to be potentially feasible by the authors of the document; however, the ultimate determination of feasibility can be made only by agency decision-makers. This EIS/EIR addresses whether mitigation presented would reduce an impact to a less-than-significant level, based on the thresholds of significance presented in each resource section.

Cumulative Impacts

Under CEQA, cumulative impacts are "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (State CEQA Guidelines Section 15355; PRC Section 21083[b]).

CEQ's regulations for implementing NEPA define a cumulative effect as

the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR Section 1508.7.)

The focus of the cumulative impacts section for each resource in this EIS/EIR is whether the incremental contribution of the proposed action or alternative to any significant cumulative impact is cumulatively considerable and, thus, significant in and of itself (State CEQA Guidelines Section 15065[a][3]).

For this EIS/EIR, cumulative impacts were identified based on: (1) information extracted from existing environmental documents or studies for the resource categories potentially affected by each project, (2) investigation of future project plans by other state and federal agencies and private entities, and (3) knowledge of expected effects of similar projects (State CEQA Guidelines Section 15130 [a][1]).

Past and Present Actions in the Plan Area

The descriptions of the environmental settings in Chapter 3, *Affected Environment*, are a product of past and ongoing actions that have shaped environmental conditions in the region. Below is a brief summary of these past and ongoing actions that have contributed to (and continue to contribute to) cumulative impacts. Because some ongoing actions are Covered Activities under the proposed action, only reasonably foreseeable future actions not included as part of the proposed action are described below.

Agriculture and Urban Development

Land conversion in the Plan Area includes the conversion of natural lands to farmland, the subsequent conversion of farmland to urban and rural residential uses, and the direct conversion of natural lands to urban and rural residential uses. Land conversion can also include conversion of farmland back into natural lands. Although this is less common, it would be an activity implemented through the PCCP in order to meet certain biological goals and objectives.

Agricultural lands in the Central Valley represent an altered landscape that retains little resemblance to the historical (pre-European settlement) condition. Conversion to agriculture has removed extensive wetlands, open grasslands, broad riparian systems, and oak woodlands of the Central Valley. However, while generally supporting a less diverse community of wildlife compared with most native habitats, some agricultural systems, if managed properly, can continue to support abundant wildlife and provide essential breeding, foraging, and roosting habitat for many resident and migrant wildlife species. In some cases, largely due to the presence of irrigation water that has been transferred from the Sierra Nevada to the Central Valley via a network of canals and streams, some natural areas have been enhanced or spatially increased (e.g., riparian woodlands and salmonid habitat in west Placer County streams). The recent trend towards the development of orchards in the Central Valley and the establishment of rice in the 1950s has reduced or eliminated habitat for many species (especially plant species) whose habitat requirements are not compatible with these agricultural landscapes. Conversely, the loss of the fruit orchards in the foothills that started in the 1950s has resulted in the reestablishment of oak and riparian woodlands and the extensive acreage of rice in the Central Valley mimics historic natural conditions that are of value to native species. In addition, the land disturbances associated with farming have contributed to sedimentation of waterways, and use of fertilizers and pesticides (including rodenticides) also have contributed to water pollution and may have contributed (directly and indirectly) to species mortality.

Although farming has resulted in adverse effects on natural conditions in the Central Valley, farmland and cropland are used as habitat for various species. These species include giant garter

snake (rice and agricultural ditches), western pond turtle (agricultural ditches and canals), Swainson's hawk (foraging in hay, grain, and row crops), burrowing owl (various agricultural types with ground squirrel burrows), white-tailed kite (foraging in hay and grain), and tricolored blackbird (foraging in hay and grain). Similarly, grazing has altered habitat conditions for many species and has contributed to water pollution, but appropriately managed grazing and rangeland can be compatible with the habitat needs of these species and several vernal pool species. Farming and grazing are expected to continue in and around portions of the Plan Area currently used for agriculture. Farmlands are subject to continuing shifts in crop types depending on various factors, including local, national, and global economic conditions. Shifts in farmland uses are not proposed as Covered Activities but are reasonably expected to occur in the future. It is not possible, however, to predict how crops may change over the proposed 50-year permit term.

A substantial amount of farmland and grazing land in the Plan Area has been converted to urban development and rural residential development over the past several decades. This has resulted in a further decrease in habitat because the habitat conditions provided by farmlands and grazing lands have been lost. Urbanization affected plants and wildlife through nitrogen deposition, erosion and sedimentation, pollution of waterways, and disruption of movement habitat linkages.

Infrastructure Development and Operation

Agricultural and urban development in the Plan Area has been accompanied by the development of infrastructure to support these land uses. Some of the major infrastructure development activities and general effects on species and their habitats are described below.

- **Water Supply Development.** Water in Placer County was primarily used for mining and agricultural uses and a small amount of domestic use beginning in the 1850s. This disaggregated usage lasted through the 1950s when Placer County began to experience urban and suburban growth. In 1957, the Placer County Water Agency Act was signed by Governor Goodwin Knight, creating the PCWA. Shortly after being established, PCWA constructed the Middle Fork American River Hydroelectric Project on the Middle Fork American River and selected tributaries. The Middle Fork Project as it is now known is managed through the Middle Fork Project Finance Authority via a joint powers agreement between PCWA and Placer County. The Middle Fork Project is a Federal Energy Regulatory Commission (FERC) licensed facility and is thereby subject to the terms and conditions of a FERC license affecting its operation. In addition to treated water service, PCWA provides irrigation water through its extensive canal system to individual customers and untreated water for treatment and resale by other retail water purveyors. Irrigation water comprises about two-thirds of PCWA's Western Water System deliveries.
- **Restoration Projects.** Several restoration programs, such as the CalFed Ecosystem Restoration Program, have worked to restore habitat along Central Valley rivers and streams. The multiple goals and actions of this program support the recovery of at-risk native species and other species. These types of restoration projects involve the rehabilitation of natural processes related to hydrology, stream channels, sediment, floodplains, and ecosystem water quality and develop habitat management and restoration actions, including restoration of river corridors, reconstruction of channel floodplain interaction, and restoration of aquatic habitat. Stream restoration projects have been implemented on Auburn Ravine, Miners Ravine (a tributary to Dry Creek), and Coon Creek.

- **Flood Control Projects.** The levee system and most of the larger dams provide flood protection for farmlands in Sacramento Valley communities. Extensive work has been undertaken to bolster flood protection for urban areas, which require a higher level of protection than agricultural areas. Past and present flood control projects within the Plan Area include the Miners Ravine Off-Channel Detention Basin Facility, a regional multi-objective flood control project including off-channel detention basin, stream and floodplain restoration, recreational trail and trailhead parking on Miners Ravine immediately downstream of the Sierra College Boulevard crossing. This project includes stream channel, floodplain and habitat restoration components. In addition to the larger municipally owned regional facilities, there are numerous project-level privately owned detention basins and other flood control facilities throughout the Plan Area. Two large municipal facilities are proposed for the Coon Creek watershed and the Dry Creek watershed that would likely be implemented during the proposed permit term.

Park Acquisition and Management

A substantial amount of land preservation has occurred along with the urbanization of the Plan Area. In addition to urban parks within the planning limits of urban growth and established communities, notable regional park areas and other protected lands are as follows (Appendix A; Placer Land Trust 2009). The following is a partial list of some of the larger protected sites within the Plan Area. The role some of these existing protected lands would play in the PCCP is identified here for context.

- **Hidden Falls Regional Park (Hidden Falls).** Hidden Falls is a 1,222-acre Placer County–managed park currently used for passive recreational uses including hiking, biking, and equestrian activities. Day time picnicking is allowed, but no overnight use is permitted. Fishing is allowed on Coon Creek consistent with state regulations, but recreational hunting is prohibited. Hidden Falls has an associated parking lot, staging area, bridges, trails, and overlooks, and in the future it is proposed to include a 10-acre outdoor nature center. Coon Creek, which runs through the Hidden Falls site, supports salmon spawning during fall-run Chinook salmon spawning season. Conditions are also appropriate for steelhead and potentially spring-run Chinook salmon. Pool depths are adequate for maintaining critical cool water temperatures for the rearing of fry for both salmon and steelhead.
- **Big Hill Area.** The Big Hill Area includes seven properties that are currently protected. They are Harvego Bear River Preserve (1,773 acres), Haddad (11 acres) Campbell (7 acres), Taylor Ranch Preserve (321 acres), Liberty Ranch Big Hill Preserve (313 acres), Kotomyan Big Hill Preserve (160 acres), and Outman Big Hill Preserve (80 acres). This area includes target communities of blue oak woodland and riparian habitat. Although a reserve unit management plan has not yet been developed for the Big Hill Area, preliminary planning shows that the Harvego Bear River Preserve portion of the Big Hill Area will include trails, a parking lot, restrooms, and related facilities. Recreational hunting may be requested via California Department of Fish and Wildlife’s (CDFW’s) Shared Habitat Alliance for Recreation Enhancement program in the future. Within the Big Hill Area passive recreational uses (hiking, biking, equestrian) will utilize existing ranch roads. New (non-paved, single track) trail construction will be minimal and will be deducted from the enrolled lands. A portion of the Big Hill Area is proposed to be enrolled into the PCCP Reserve System and would contribute toward the Plan’s protection commitments for natural communities and associated Covered Species’ habitat.
- **Oest Ranch Northern Preserve.** The Oest Ranch Northern Preserve consists of 113 acres of oak woodland savannah and agricultural grassland permanently protected by conservation

easement by the Placer Land Trust in 2015 and 2016 in partnership with the Oest family, with primary funding from the Wildlife Conservation Board. The property is located in North Auburn near SR 49 and Lone Star Road close to the Bear River. The preserve contains mixed oak woodlands and some open pasture for livestock grazing. Placer Land Trust's easement prohibits development and other uses but does allow for sustainable agricultural production.

- **Taylor Ranch.** The Taylor Ranch site is located about 1 mile from Hidden Falls Regional Park along Coon Creek. Placer Land Trust owns this 313-acre property in fee title, and there is no conservation easement on the site. Placer County and the Placer Legacy Program was a funding partner in this acquisition, which was led by Placer Land Trust and the Trust for Public Land. Of the total 313 acres, 38 acres are proposed for enrollment into the PCCP Reserve System and would contribute toward the Plan's protection commitments for communities and associated Covered Species' habitat; this is based on the proportion of funding the Placer Legacy Program contributed to the acquisition. The 38 acres consist of 7 acres of riverine/riparian complex and 31 acres of oak woodland. The Taylor Ranch site supports cattle grazing and includes a public access trail easement to be improved once additional trail connections are obtained. The trail easement would not be counted towards the Plan's protection commitments.
- **Harvego Bear River Preserve.** The Harvego Bear River Preserve is located along the Bear River in the foothills of northwest Auburn. The property is owned in fee by the Placer Land Trust and has a conservation easement held by Placer County. Of the total 1,773 acres, 933 acres are proposed for enrollment into the PCCP Reserve System and would contribute toward the Plan's protection commitments for natural communities and associated Covered Species' habitat. The 933 acres are dominated by blue oak woodlands (917 acres), which represent the largest intact oak woodland under single ownership within the Plan Area. The 933 acres also include 13 acres of grassland, 2 acres of aquatic/wetland complex, and approximately 1 acre of riverine/riparian complex associated with a 3-mile reach of the Bear River. Placer County's conservation easement includes rights for trail construction for passive trail use and a staging area for a parking lot and restroom. No active recreation is allowed. Ranching activities will continue as well as the establishment of one home site for an onsite caretaker. The developed recreation areas and home site would not count toward the Plan's conservation commitments.
- **Doty Ravine.** The Doty Ravine Preserve is a 427-acre property owned by the Placer Land Trust in fee title, with an Irrevocable Offer of Dedication to Placer County for recordation of a conservation easement upon approval of the habitat conservation plan (HCP)/natural community conservation plan (NCCP). Of the total 427 acres, 418 acres of the site are proposed for enrollment into the PCCP Reserve System and would contribute toward the Plan's protection commitment for natural communities and associated Covered Species' habitat. Recently, California black rail has been detected in a wetland on this preserve. The 418 acres consist of 23 acres of vernal pool complex, 370 acres of grassland (including native grasslands), 1 acre of riverine/riparian complex, and 24 acres of oak woodland. This site is proposed to be enrolled into the PCCP Reserve System and would contribute toward the Plan's conservation commitments for natural communities and associated Covered Species' habitat.
- **Swainson's Grassland Preserve.** Native grasslands within this preserve provide essential feeding grounds for Swainson's Hawk. Swainson's Grassland Preserve consists of 469 acres on SR 65 north of Lincoln which have been protected since April 21, 2005, through Placer Land Trust's West Placer Habitat Protection Program. This site is proposed to be enrolled into the PCCP Reserve System and would contribute toward the Plan's conservation commitments for natural communities and associated Covered Species' habitat.

Reasonably Foreseeable Projects in the Plan Area

Reasonably foreseeable projects in the Plan Area that could affect Covered Species would be new projects not considered part of the proposed action or action alternatives. Existing ongoing operations or maintenance of facilities in the Plan Area by agencies not participating in PCCP would continue as is and would be considered part of the baseline. The following general categories of projects are considered new and therefore are considered reasonably foreseeable projects to be addressed in the analysis of cumulative projects for each relevant resource topic.

- Emergency activities not defined as “changed circumstances” by the Plan (Appendix A).
- Ongoing agricultural land conversions (e.g., conversion of cropland to orchard).
- Water transfers by various water purveyors within the county to water purveyors in other California counties.

The following specific projects are considered new and therefore are considered reasonably foreseeable projects to be addressed in the resource-specific cumulative project analysis.

- **Antelope Creek Flood Control Project.** The Placer County Flood Control and Water Conservation District prepared an initial study/mitigated negative declaration in November 2013 to evaluate a proposed project to construct to primary flood control elements along with recreational and aquatic and riparian habitat restoration elements within the City of Roseville. The project would result in a slight increase to the footprint of the existing Federal Emergency Management Agency–recognized 100-year floodplain limits and construct two fish-friendly, on-channel weirs across Antelope Creek (Placer County 2013b). The first of the two weirs, the Upper Weir, was completed in February 2018. The District is seeking grant funding to complete the second Lower Weir.
- **Yuba Sutter Habitat Conservation Program.** The proposed Yuba-Sutter Regional Conservation Plan (YSRCP), a joint HCP/NCCP, outlines strategies to avoid, minimize, and mitigate potential effects on 18 covered plant and animal species expected from development of up to 35,000 acres within a 400,000-acre area within portions of Yuba and Sutter Counties, California, by establishing a 50,000-acre reserve system.
- **Placer Parkway.** The Placer County Department of Public Works and Facility Services has proposed a limited access roadway that connects SR 65 in Placer County to SR 99 in Sutter County. It will be an approximately 15-mile-long, high-speed roadway linking existing and planned development and improving regional accessibility to the Interstate (I-) 5 corridor, downtown Sacramento, and Sacramento International Airport (Appendix A:Chapter 2).
- **Western Regional Sanitary Landfill Expansion.** The Western Regional Sanitary Landfill located near SR 65 between Roseville and Lincoln, provides regionalized recycling and waste disposal services for the western portion of Placer County. The facility is currently permitted and expected to operate through 2058. Landfill expansion could take place on a 158-acre parcel east of the existing landfill boundary or a 457-acre parcel west of Fiddymont Road (Appendix A:Chapter 2).
- **I-80/SR 65 Interchange.** The I-80/SR 65 interchange was constructed in 1985 and is in early stages of an improvement project to accommodate traffic levels and population growth in the area. The improvements are intended to reduce congestion, improve traffic operation, and enhance safety (Appendix A:Chapter 2).

- **Lakeview Farms Volumetric Mitigation Facility.** The City of Lincoln purchased 456 acres north of Waltz Road and currently used for rice production to construct an off-channel retention facility for flood control. The site would function as a retention basin only in large storm events during the rainy season of December through April and would remain in rice production from approximately March through September.
- **Scilacci Farms Flood Control Project.** Placer County is planning to develop a stormwater retention basin at Scilacci Farms, also off Coon Creek. The facility would provide volumetric mitigation of stormwater drainage from developed area during a range of storm events. Once complete, the facility would capture stormwater only when the Sacramento River gauge at Verona exceeds 37 feet, which is 4.3 feet below flood stage (Appendix A:Chapter 2).

Methods for Determining Cumulative Effects

Each resource section contains an analysis of the cumulative effects specific to that resource that would potentially result due to implementation of the proposed action or alternatives. Potential cumulative effects associated with implementation of the proposed action or alternatives are analyzed both quantitatively and qualitatively in this EIS/EIR. In many cases, the resource-specific cumulative analysis is primarily qualitative and considers the contribution of the proposed action or alternatives to other programs, projects, and policies. As provided for under CEQA (14 CCR 15130[b]) and consistent with NEPA (40 CFR 1508.7), the analysis of cumulative impacts is evaluated at a level of detail sufficient for the Lead Agencies to use as a reasonable basis for decision-making in selecting between the alternatives.

Approach to Analyzing Alternatives Considered

As required by NEPA and CEQA, a no action alternative must be described and evaluated in an EIS/EIR. Additionally, the proposed action alternative must be described and evaluated. The general approach to analyzing each of these alternatives in this chapter is discussed below.

Alternative 1—No Action

For Alternative 1, the no action alternative, analysis in each resource section evaluates the expected changes to the resource in the absence of the proposed action. This analysis generally follows a 50-year study period to correspond with the permit term under the proposed action. As described in Chapter 2, *Proposed Action and Alternatives*, Alternative 1 encompasses most of the same activities that would be Covered Activities under the proposed action. However, Alternative 1 analysis considers biological resources differently, as outlined below.

- Biological resource impacts are considered only for projects with discretionary action by one of the Permit Applicants or with a potential to adversely affect listed species (i.e., would require consultation with U.S. Fish and Wildlife Service [USFWS], National Marine Fisheries Service [NMFS], and/or CDFW).
- Biological resource impacts are considered on a project-by-project basis, with no regional framework for impact avoidance and minimization.
- Biological resource mitigation is considered on a project-by-project basis, with various types of mitigation measures developed independently for each project, including compensatory

mitigation in offsite areas, which could be in- and out-of-county. There would be no regional framework for conservation of Covered Species or natural communities or preservation of habitat linkages.

Alternative 1 includes reasonably foreseeable activities in the Plan Area associated with urbanization and associated infrastructure development, operation, and maintenance included in the various planning documents of Placer County and the City of Lincoln as well as future projects of SPRTA and PCWA. The general plan EIRs analyzed these activities, and Alternative 1 includes these analyses by incorporating by reference and carries these conclusions forward. Any mitigation included in these EIRs is incorporated by reference into the Alternative 1 analysis. In addition, typical best management practices used during construction by SPRTA and PCWA are also incorporated into Alternative 1, as these would occur whether or not the PCCP were to be approved. The land use changes associated with these activities would have various effects on each of the resources considered in this EIS/EIR, including direct and indirect effects, temporary effects associated with construction, and long-term effects of operation and maintenance. Conclusions about the significance of these impacts are based on the extent of the expected land use changes and the adequacy of the regulatory framework (e.g., local regulations and requirements) to provide effective mitigation.

While in some cases, mitigation measures identified for the action alternatives could reduce impacts associated with Alternative 1, USFWS and the County have no jurisdiction to impose mitigation measures under the no action alternative, as no permits would be approved and no actions would be taken. For these reasons, mitigation measures are not identified for impacts of Alternative 1, the no action alternative, and some impacts are therefore identified as significant and unavoidable.

Alternative 2—Proposed Action Alternative

As described in Chapter 2, *Proposed Action and Alternatives*, the proposed action considered in this EIS/EIR is as follows.

- Issuance of incidental take permits (ITPs) by USFWS and the NMFS.
- Issuance of an NCCP permit from CDFW.
- Adoption of the PCCP, including the HCP/NCCP and the CARP by the agencies receiving the endangered species and wetlands permits.
- Approval of associated implementing actions such as adoption or amendment of plans and ordinances, including the in-lieu fee program.

Issuance of the ITPs and the NCCP permit by the Wildlife Agencies provides compliance only with the federal Endangered Species Act (ESA), California Endangered Species Act (CESA), and Natural Community Conservation Planning Act, and such compliance is subject to project-level terms and conditions, as provided in the Plan and implementing agreement. Approval of the proposed action does not confer or imply approval to implement any Covered Activity by the Permit Applicants. All Covered Activities are subject to the land use or other authority of one or more of the Permit Applicants. Before approving or implementing a Covered Activity, the Permit Applicant with authority over the Covered Activity must comply with CEQA and other applicable laws and would ordinarily require a project-level environmental analysis. If a Covered Activity requires a project-level federal authorization or permit, a project-level environmental analysis under NEPA may also be required. Although the proposed action pertains specifically to the Covered Activities'

environmental effects on biological and aquatic resources, other reasonably foreseeable environmental effects of the Covered Activities are discussed in this chapter to provide context for the analysis of the proposed action and alternatives.

The reasonably foreseeable activities in the Plan Area associated with urbanization and associated infrastructure development, operation, and maintenance included in the various planning documents of Placer County and the City of Lincoln are described above under Alternative 1.

Alternative 2, the proposed action, would add a regional framework for biological resource impact avoidance, minimization, and mitigation and for natural community conservation. This would be provided by the PCCP and implemented as a result of the Wildlife Agencies issuing permit(s). The impact analysis of Alternative 2 focuses on how permit issuance could affect a resource differently from Alternative 1. The analysis was based on the following.

- The PCCP conservation strategy would apply to all Covered Activities.
- All Covered Activities would be implemented using the avoidance and minimization measures summarized in the *Alternative 2—Proposed Action* section of Chapter 2, *Proposed Action and Alternatives*, of this EIS/EIR.
- Alternative 2 would include the acquisition and enhancement of a large, connected conservation lands system, with coordinated management for the benefit of Covered Species. This system would have a substantially larger footprint of land targeted for protection compared to the system of independent mitigation sites under Alternative 1, because not all land cover types and Covered Species would require mitigation under existing statutory and regulatory mechanisms.
- Acquisition and enhancement of the conservation lands system would be primarily located within the Reserve Acquisition Area. However, the land acquisition criteria do allow for some high value lands to be acquired outside the Reserve Acquisition Area but within the Plan Area.
- Activities on the conservation lands system would be consistent with the conservation measures described in the conservation strategy.

Unless affected by PCCP conservation activities, impacts of Alternative 1 would also occur under Alternative 2, the proposed action. This is because Alternative 1 encompasses the same urbanization and infrastructure development activities that are identified as Covered Activities under Alternative 2. Therefore, the analysis in the EIS/EIR addresses most of the reasonably foreseeable activities in the Plan Area associated with urbanization and associated infrastructure development, operation, and maintenance.

The analysis of Alternative 2, the proposed action, also describes how the general concepts identified in the conservation strategy for biological resource mitigation could affect each of the individual resources considered because the conservation strategy is part of Alternative 2. Thus, the analysis of the PCCP focuses on the consequences of issuing the federal ITPs and the state NCCP permit. The PCCP is based on extensive consultation with the Permit Applicants and Wildlife Agencies, resulting in a detailed database of activities that allows for a quantitative analysis of anticipated changes in land uses as a result of activities under Alternative 2 (i.e., Covered Activities under the PCCP) and the conservation strategy of the PCCP. The land use changes associated with these activities would have various effects on each of the resources considered in the PCCP and this EIS/EIR, including direct and indirect effects, temporary effects associated with construction, and long-term effects of operation and maintenance. Conclusions about the significance of these impacts are based on the extent of the expected land use changes and the adequacy of the regulatory

framework (e.g., local regulations and requirements) to provide effective mitigation. In addition, the conclusions about the significance of impacts consider how the implementation of the conservation strategy of the PCCP, along with the conditions on Covered Activities and avoidance and minimization measures included in the PCCP, will serve to reduce the impacts of the Covered Activities.

Impact Mechanisms

Under Alternative 2, the proposed action, impacts could occur during construction or operations and maintenance related to the proposed action and Covered Activities, which would include the following.

- Habitat restoration and creation (conservation measures designed to protect, enhance, and restore and improve the ecological function of natural communities, and to avoid, minimize, and compensate for effects on Covered Species).
- Adaptive management and monitoring activities.
- The existing, planned, and proposed land uses over which Placer County and the City of Lincoln have land use authority.
- Local transportation projects.
- Water and wastewater projects.

Most Covered Activities would require individual permits and approvals pursuant to Placer County and the City of Lincoln's general plans and land use regulations, or the requirements of the implementing agency, and would undergo subsequent project-level CEQA review and relevant NEPA review for construction and operations-related impacts; some Covered Activities, however, may be exempted from environmental review requirements due to project characteristics.

Covered Activities in the city of Lincoln and in unincorporated areas of Placer County would have the potential to result in impacts as identified in the general plans for these jurisdictions, as Alternative 2, the proposed action, would serve to streamline the development in the Plan Area envisioned in the *Placer County General Plan*, *City of Lincoln General Plan*, as well as future projects of SPRTA and PCWA.

Effects from Covered Activities would be anticipated to result from the types of actions listed below.

- Grading, excavation, trenching, and placement of fill material, including earthmoving, re-contouring, excavation, or removal or modification of landscape features or structures.
- Vegetation removal with off-road construction equipment to reduce fire hazards and control invasive plants.
- Construction and maintenance of residential, commercial, retail, recreational, and industrial land uses as specified in the *Placer County General Plan* and *City of Lincoln General Plan*.
- Construction of new utility infrastructure.
- Widening of existing and development of new roads.
- Temporary construction or land disturbance associated with maintenance and/or operation of water facilities and other waterways.

Alternatives 3 and 4—Other Action Alternatives

The other action alternatives (Alternatives 3 and 4) would consist of modifications to the regional framework for biological resource impact avoidance, minimization, and mitigation and for natural community conservation through various measures, as described in Chapter 2, *Proposed Action and Alternatives*. Alternatives 3 and 4 would likely result in the Wildlife Agencies issuing permit(s), similar to the proposed action. Therefore, the impact analyses of Alternatives 3 and 4 focus on how permit issuance could affect a resource. The land use changes associated with activities described in Chapter 2 for these alternatives would have various effects on each of the resources considered in the PCCP and this EIS/EIR, including direct and indirect effects, temporary effects associated with construction, and long-term effects of operation and maintenance. Conclusions about the significance of these impacts are based on the extent of the expected land use changes and the adequacy of the existing regulatory framework to provide effective mitigation.

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