The Reserve System will provide a means for protecting, managing, enhancing, and restoring or creating the natural communities and habitats that support 14 species that are proposed for coverage under the Plan, including the vernal pool fairy shrimp, vernal pool tadpole shrimp, Swainson's hawk, and other species known to occur in the SIA. The Reserve System will mainly be located in the western and northern Valley and in the northern Foothills, regionally separated from future urban and suburban growth. A large portion of the SIA (approximately 1,300 acres and 16 percent of the SIA) adjacent to existing conservation reserves is identified and being considered in the PCCP as a possible reserve acquisition area, to meet grassland/vernal pool complex conservation objectives.

Unlike many similar plans produced over the past 20 years, the PCCP seeks to integrate the federal Clean Water Act's regulations for wetlands with a conservation strategy for sensitive species regulated by the ESA/CESA. As a result, the Plan provides for the protection, enhancement, restoration, and creation of the aquatic/wetland complex natural community as a fully integrated strategy. In addition to the delineated boundary of a wetland, the Conservation Strategy provides for the protection of surrounding upland, which is ecologically important for many wetland habitats, especially vernal pools. Preservation, restoration and creation of wetlands will specifically provide in-kind compensatory in order to achieve conservation of the covered species and no overall net loss of wetland habitat through the term of the permit.

One of the key objectives of the PCCP is to shift regulatory responsibility from state and federal agencies to the local jurisdictions (Placer County and the City of Lincoln). The PCCP is also intended to provide for a better mitigation and conservation framework for impacts associated with development. Once complete, the PCCP will allow the participating agencies to integrate regulatory actions associated with endangered species and wetlands with their local entitlement processing. It will also allow for more efficient planning and permitting for local infrastructure projects. Lastly, the PCCP will help meet the County's conservation goals expressed by the General Plan and the Placer Legacy program, by developing a large, managed and monitored reserve area that will provide open space and agricultural conservation in perpetuity.

Placer Legacy Open Space and Agricultural Conservation Program

The Placer Legacy Open Space and Agricultural Conservation Program (Placer Legacy Program) is a conservation planning agreement with the objective of comprehensive planning for preservation of biological resources, agricultural lands, and open space.

The Placer County General Plan, adopted in 1994 and revised in 2013, contains policies to preserve open space, agricultural and natural resources, some of which are listed in this section. In December 1997 the Placer County Board of Supervisors directed the Planning Director to initiate a program to provide for long-term preservation of open space in Placer County. In April 1998 the Board of Supervisors formed a citizen advisory committee and initiated an open space implementation program in accordance with specified goals, elements, and measures of success. This program became the Placer Legacy Program. The specific objectives of the Placer Legacy Program are to:

- Maintain a viable agricultural segment of the economy,
- Conserve natural features necessary for access to a variety of outdoor recreation opportunities,
- Retain important and historic areas,
- Preserve the diversity of plant and animal communities,
- Protect endangered and other special status plant and animal species,
- Separate urban areas into distinct communities, and
- Ensure public safety.

SECTION 5.4 SOIL AND MINERAL RESOURCES

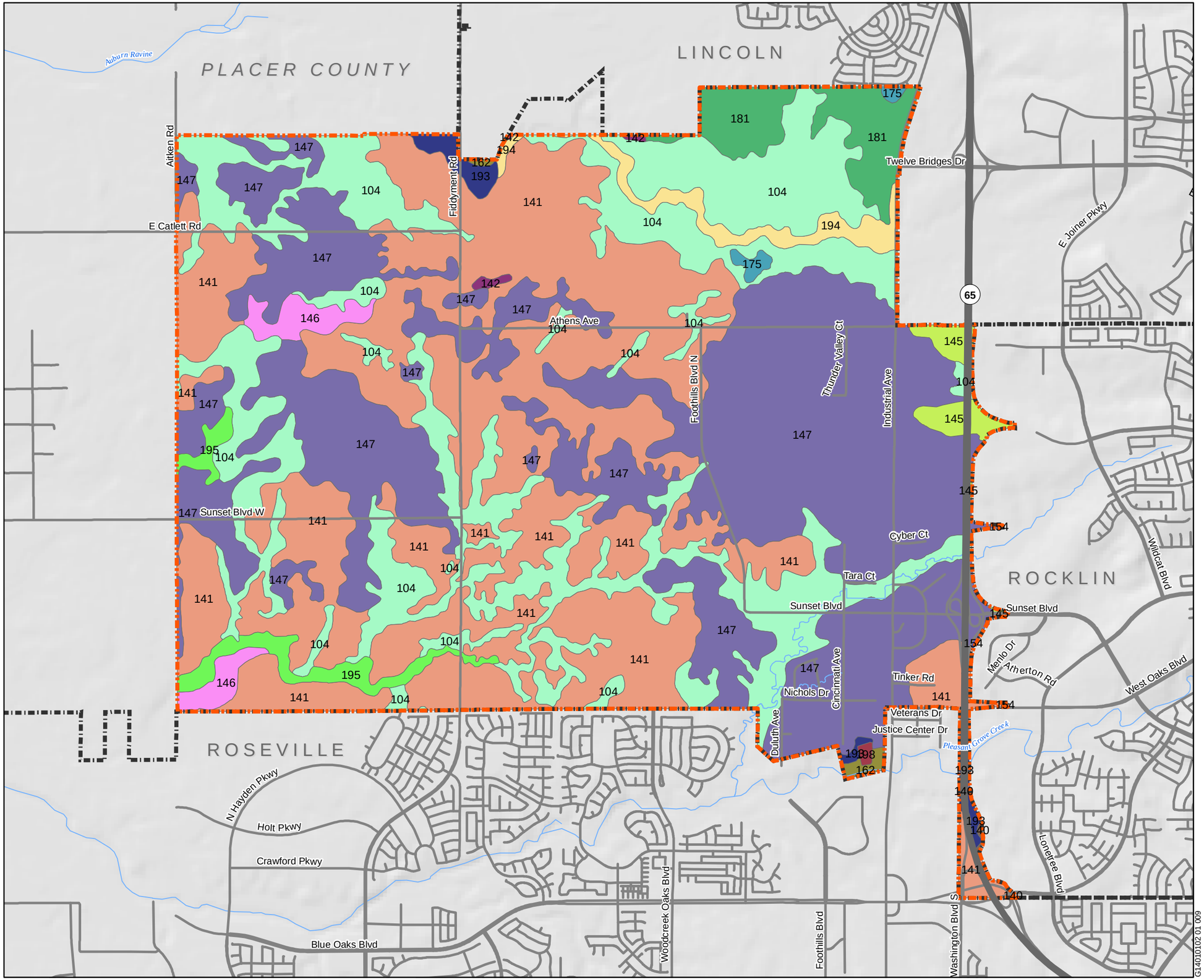
Existing Conditions

Soils

Soil types within the SIA were determined using the online 2014 NRCS soils survey as well as the Soil Survey of Placer County, California, Western Part. These surveys map soil units and provide a summary of the major physical characteristics with recommendations based on the soil characteristics. Soils mapped within the SIA include: Alamo-Fiddyment complex (0 to 5 percent slopes), Fiddyment- Kaseberg loams (2 to 9 percent slopes), Cometa-Fiddyment complex (1 to 5 percent slopes), Exchequer-Rock outcrop complex (2 to 30 percent slopes), San Joaquin sandy loam (1 to 5 percent slopes), Fiddyment Loam (1 to 8 percent slopes), and Xerofluvents, hardpan stratum.

Of the soils mapped, the near surface soils that comprise about 90 percent the SIA belong to the Fiddyment-Kaseberg loams (map unit 147), Cometa-Fiddyment complex (map unit 141), and the Alamo-Fiddyment complex (map unit 104). The soil properties of these three main soil types are summarized in Table 5-4. A Soil Map is shown in Figure 5-7 and soil descriptions are discussed below.

Sunset Area Plan | Figure 5-7
Soils



Planning Area

City Limits

Soil Type

104	Alamo-Fiddyment complex, 0-5% slopes
141	Cometa-Fiddyment complex, 1-5% slopes
142	Cometa-Ramona sandy loams, 1-5% slopes
140	Cometa sandy loam, 1-5% slopes
145	Exchequer-Rock outcrop complex, 2-30% slopes
147	Fiddyment-Kaseberg loams, 2-9% slopes
146	Fiddyment loam, 1-8% slopes
154	Inks-Exchequer complex, 2-25% slopes
162	Kilaga loam
175	Ramona sandy loam, 2-9% slopes
181	San Joaquin sandy loam, 1-5% slopes
198	Water
194	Xerofluvents, frequently flooded
195	Xerofluvents, hardpan substratum
193	Xerofluvents, occasionally flooded

160 acres
40
10

N

0 0.25 0.5 1 1.5 Miles

Date: 04-20-2015

Source: NRCS, 2014

TABLE 5-4
PROPERTIES OF PREDOMINANT SOIL TYPES
Sunset Industrial Area

Soil Name	Hydrologic Group[1]	Depth to Bedrock (inches)	Texture[2]	Soil Composition			Erosion (Kf)[3]	Liquid Limit[4]	Plasticity Index[5]
				Sand (%)	Silt (%)	Clay (%)			
Fiddyment-Kaseberg Loams									
Fiddyment	C	35-39	ML, CL	45	41	14	.37	20-50	NP-30
Kaseberg	D	17-21	ML	44	41	15	.49	25-30	NP-5
Cometa-Fiddyment Complex									
Cometa	D	>60	SC, SM, ML, CL, CH	66-28	29-19	43-15	.32	10-60	NP-35
Fiddyment	D	35-39	ML, CL	45-35	41-34	31-14	.49	35-50	20-30
Alamo-Fiddyment Complex									
Alamo	D	37-41	CH	22	28	50	.24	50-60	25-35
Fiddyment	C	35-39	ML, CL	45-41	45-41	25-14	.49	20-50	NP-30

[1]Hydrologic group C consists chiefly of soils that have a layer that impedes the downward movement of water or soils of moderately fine or fine texture. Hydrologic group D consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or a clay layer at or near the surface, and soils that are shallow over nearly impervious material. Because of the clay content of group D soils, they have a high rate of runoff.
[2]Based on the Unified Soil Classification System: SM = silty sand, SC = clayey sand, ML = silt, CL = clay of low plasticity (lean clay), CH = clay of high plasticity (fat clay)
[3]The K factor is one of the indicators of a soil's susceptibility to erosion. The following soil characteristics are used in determining the K factor: organic matter content, soil texture (percent of very fine sand and silt), structure, soil, depth, permeability, and the presence of impervious subsurface layers. K factors of less than 0.3 are less easily eroded, while more easily eroded soils with low infiltration capacities will have a K factor of 0.3 or higher (USDA NRCS, 2014).
[4]Water content, in percent, at which soil transitions from plastic state to a viscous liquid.
[5]A measure of the plasticity of soil based on the range of water content at which the soil exhibits plastic properties. Plasticity is the degree to which soil can be reworked causing permanent deformation without rupturing. Soils with a high PI tend to be clay, those with a lower PI tend to be silt, and those with a PI of 0 (non-plastic) tend to have little or no silt or clay. In general, soils with significant plasticity are not susceptible to liquefaction. The plasticity index is as follows:

NP-3: nonplastic
3-15: slightly plastic
15-30: medium plastic
>30: highly plastic

Source: Fugro 2015, compiled by Ascent

Fiddyment-Kaseberg Loams (Map Unit 147)

The map unit area is comprised of 50 percent Fiddyment soils, 30 percent Kaseberg soils, and 20 percent minor components. Fiddyment loam is moderately deep soil over a silica-indurated hardpan formed over bedded siltstone. Kaseberg loam is well-drained, shallow soil over hardpan. The Fiddyment and Kaseberg soil series are classified as hydrologic group C and D, respectively. Both hydrologic groups are defined by slow to very slow infiltration rates when thoroughly wet, and have a very slow rate of water transmission. The hydrologic group C consists chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine or fine texture. The hydrologic group D soils consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or a clay layer at or near the surface, and soils that are shallow over nearly impervious material. Because of the clay content, group D soils have a high rate of runoff and a lower potential for erosion. (Note that erosion susceptibility is based on multiple factors including the K factors and presence of fine grained materials, as well as the relief across the site which, in the case of the group D soils, keep surface water velocities lower.) The major construction limitation is the limited ability of the soil to support a load. Physical properties of the Fiddyment and Kaseberg loams are listed in Table 5-4.

Cometa-Fiddyment Complex (Map Unit 141)

These soils are generally found on low terraces west of State Route (SR) 65 and south of Auburn Ravine at elevations of 75 to 200 feet. The composition of the map unit is 35 percent Cometa soil, 35 percent Fiddyment soil, 10 percent of San Joaquin sandy loam, 10 percent Kaseberg loam, 5 percent Ramona sandy loam on scattered narrow ridges, and 5 percent Alamo clay in some drainage ways and basins. The Cometa is a deep, well-drained claypan soil. The Fiddyment is a well-drained soil that is moderately deep over a hardpan. Both soils are classified as hydrologic group D. Because of the clay content, the group D soils have a high rate of runoff and a lower potential for erosion. The major limitations to construction for the Cometa-Fiddyment complex is the shrink-swell potential of the soil and the limited ability of the soil to support a load. Physical properties of the Cometa-Fiddyment complex are listed in Table 5-4.

Alamo-Fiddyment Complex (Map Unit 104)

The map unit area consists of 50 percent Alamo soils, 30 percent Fiddyment soils, and 20 percent minor components. These nearly level to undulating soils are on low terraces at elevations of 50 to 130 feet. The Alamo soil is present in nearly level basins and drainage ways, and the Fiddyment soil is on side slopes and ridges. The Alamo soil is a poorly drained clay that is moderately deep over hardpan. The Fiddyment soil is well drained and is moderately deep over hardpan. The Alamo soil and Fiddyment soil are classified as hydrologic group D and C, respectively. Both hydrologic groups have slow to very slow infiltration rates when thoroughly wet, and a very slow rate of water transmission The major limitations to construction for the Alamo soils are wetness, shrink-swell potential, and limited ability to support a load. The Alamo

and Fiddyment soils have a low susceptibility to erosion due to the increase in clay content in the soil horizon. Physical properties of the Alamo-Fiddyment complex are listed in Table 5-4.

San Joaquin Sandy Loam (Map Unit 181)

The San Joaquin sandy loam is found in the northeast corner of the SIA. The map unit area consists of 80 percent San Joaquin sandy loam and 20 percent minor components. This is a well-drained claypan soil that is moderately deep over a hardpan. It is present on low terraces at elevations of 50 to 200 feet. The soil is classified as hydrologic group D. Because of the clay content of group D soils, they have a high rate of runoff. The San Joaquin sandy loam soils have a low susceptibility to erosion. The major limitations to construction on San Joaquin sandy loam are the shrink-swell potential of the soil and the limited ability of the soil to support a load.

Exchequer-Rock Outcrop Complex (Map Unit 145)

The Exchequer-Rock outcrop complex is found along the eastern edge of the SIA. The map unit area consists of 80 percent Exchequer-Rock complex and 20 percent minor components. This soil type occurs on long, broad volcanic ridges with side slopes at elevations of 100 to 1,000 feet. It is comprised of about 60 percent Exchequer soil and 15 percent rock outcrop. The Exchequer soil is a somewhat excessively drained, very stony soil. The rock outcrop consists of hard andesitic breccia. Exchequer-Rock outcrop complex is classified as hydrologic group D. The potential for erosion of the soil is variable, low to high, yet the potential for erosion of the rock outcrop is very low.

Fiddyment Loam (Map Unit 146)

The map unit area consists of 85 percent Fiddyment loam and 15 percent minor constituents. This is a moderately deep, well-drained soil on low terraces at elevations of 75 to 135 feet. The Fiddyment soil is classified as hydrologic group D. Surface runoff is slow to medium and the potential for erosion is low to moderate. The main limitation to construction is the ability of the soil to support a load.

Xerofluvents, Hardpan Stratum (Map Unit 195)

This unit is found along tributaries to Pleasant Grove Creek near the western edge and southwest corner of the SIA. Xerofluvents, or hardpan stratum, consist of small areas of somewhat poorly drained loamy alluvium in minor drainage ways. The map unit area consists of 85 percent fluvents and 15 percent Alamo clay. The potential for erosion is low. These soils are occasionally flooded by stream overflow.

Mineral Resources

Placer County contains several mineral extraction sites, including mines and other operation that extract clay, gold, sand, gravel, stone, and limestone. Several clay extraction facilities are located approximately four miles to the north of the SIA outside the city of Lincoln. Patterson Sand and Gravel Mine, owned by Cemex Construction Materials, LP, is located approximately 13 miles north of the SIA on the western side of Camp Far West Road.

The California Geologic Survey (CGS) has mapped mineral and mineral aggregate resources in Placer County. The MZ-4 designation occurs throughout the SIA. The MZ-4 designation is defined as "areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources." No mineral extraction operations exist in the SIA.

There are no oil or gas extraction wells within the SIA. The nearest such well is a plugged, dry gas production well located approximately 3 miles west from the SIA. See Section 5.5, "Oil and Gas Resources," for additional information.

Regulatory Setting

Federal

No Federal plans, policies, regulations, or laws are relevant to mineral resources in the SIA.

State

California Surface Mining and Reclamation Act (SMARA)

The primary State law concerning conservation and development of mineral resources is the SMARA of 1975, as amended. The SMARA was enacted in 1975 to limit new development in areas with significant mineral deposits and to prevent or minimize adverse impacts of surface mining to public health, property, and the environment.

California Building Code (CBC)

The CBC or the California Code of Regulations (CCRs), Title 24, Part 2, is a portion of the California Building Standard Code. The California Building Standards Commission is responsible for coordinating all building standards, including Title 24. Under state law, all building standard must be centralized in Title 24 or they are not enforceable. Published by the International Conference of Building Officials (ICBO), the Uniform Building Code (UBC) is a widely adopted model building code in the United States. The CBC incorporates by reference the UBC with necessary California amendments. Approximately one-third of the text within the CBC has been tailored for California earthquake conditions.

Placer County General Plan

The Placer County General Plan contains several goals and policies pertaining to soils and mineral resources, as summarized below.

Goal 1.K: To protect the visual and scenic resources of Placer County as important quality-of-life amenities for County residents and a principal asset in the promotion of recreation and tourism.

- **Policy 1.K.4.** The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines:
  - Limit cuts and fills,
  - Limit grading to the smallest practical area of land,
  - Limit land exposure to the shortest practical amount of time,
  - Replant graded areas to ensure establishment of plant cover before the next rainy season,
  - Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development, and
  - Provide and maintain site-specific construction Best Management Practices (BMPs).

Goal 1.J: To encourage commercial mining operations within areas designated for such extraction, where environmental, aesthetic, and adjacent land use compatibility impacts can be adequately mitigated.

- **Policy 1.J.1.** The County shall require new mining operations to be designed to provide a buffer between existing or likely adjacent uses, minimize incompatibility with nearby uses, and adequately mitigate their environmental and aesthetic impacts.
- **Policy 1.J.2.** The County shall require that new non-mining land uses adjacent to existing mining operations be designed to provide a buffer between the new development and the mining operations. The buffer distance will be based upon an evaluation of noise, aesthetics, drainage, operating conditions, topography, lighting, traffic, operating hours and air quality.
- **Policy 1.J.3.** The County shall discourage the development of any uses that would be incompatible with adjacent mining operations or would restrict future extraction of significant mineral resources.
- **Policy 1.J.4.** The County shall discourage the development of incompatible land uses in areas that have been identified as having potentially significant mineral resources.

- **Policy 1.J.5.** The County shall require that all mining operations prepare and implement reclamation plans that mitigate environmental impacts and incorporate adequate security to guarantee proposed reclamation.
- **Policy 1.J.6.** The County shall require that plans for mining operations incorporate adequate measures to minimize impacts to local residents and County roadways.

SECTION 5.5 PALEONTOLOGICAL, ARCHAEOLOGICAL, AND HISTORICAL RESOURCES

Existing Conditions

Cultural resources include historic buildings and structures, historic districts, historic sites, prehistoric and historic archaeological sites, and other prehistoric and historic objects and artifacts. Paleontological resources include vertebrate, invertebrate, or plant fossils.

Parus Consulting, Inc. (Parus) conducted paleontological, archaeological, and historical investigations for the SIA. These investigations were conducted in March 2015 and included a records search conducted at the North Central Information Center (NCIC) at California State University, Sacramento, on March 17, 2015, archival research, consultation with the Native American community, geoarchaeological research (e.g., review of geological and soils information) to identify the potential sensitivity of the SIA for the presence of significant buried deposits of cultural resources, and a search of the University of California Museum of Paleontology (UCMP) database on March 17, 2015, to identify the sensitivity of the SIA for the presence of paleontological resources. All Parus staff involved in the archaeological, historical, and paleontological, investigations for the SIA meet the U.S. Secretary of the Interior's Standards and Guidelines for Professional Qualifications in archaeology and history.

Environmental Setting

The SIA is located near the eastern edge of the Central Valley. The valley and the adjacent foothills of the Sierra Nevada provided a resource base that was exploited by prehistoric and historic Native American groups. Euroamericans also used the area for agricultural and ranching.

Geology and Soils

The SIA primarily consists of soils representing the Fiddyment series (Figure 5-7 in Section 5.4, "Soils and Mineral Resources"). The Fiddyment soils in the SIA are composed primarily of Alfisols and Entisols. Alfisols are mineral soils typically located on late Pleistocene or older surfaces. Entisols are soils that do not exhibit diagnostic horizons because they are too young, erosion has removed material faster than soil can develop, or new material is added faster than soil develops (NRCS 1999:389). Specific soil types in the SIA are discussed in detail in Section 5.3.

Regional Prehistory

The Central Valley of California has long held the attention of California archaeologists. Indeed, Archaeological work during the 1920s and 1930s led to the development of the first cultural chronology for central California presented by Lillard, Heizer, and Fenenga in 1939. This chronology was based on the results of excavations conducted in the lower Sacramento River Valley. The chronology identified three archaeological cultures. These cultures were named Early, Transitional, and Late.

Heizer redefined and re-categorized these three archaeological cultures into three time periods designated the Early, Middle, and Late Horizons. Based on his excavations at CA-SAC-107, Heizer identified the Windmiller cultural pattern as representative of the Early Horizon. Heizer intimated that new research and a reanalysis of existing data would also be initiated for cultures associated with the Middle and Late Horizons, but did not complete this work.

In 1972 Ragir, a student of Heizer, further refined the Windmiller Pattern. Ragir reanalyzed, updated, and elaborated the description, temporal span, and geographic distribution of the Windmiller Pattern. The Windmiller Pattern is highlighted by the following: large, heavy, stemmed and leaf-shaped projectile points commonly made of a variety of materials; perforate charmstones; haliotis and olivella shell beads and ornaments; trident fish spears; baked clay balls (presumably for cooking in baskets); flat slab millingstones; small numbers of mortars; and ventrally extended burials oriented toward the west. The subsistence pattern of Windmiller groups probably emphasized hunting and fishing, with seed collecting (possibly including acorns) supplementing the diet. Ragir dates the Windmiller Pattern from 4,500-2,500 B.P., with a maximum age of 7,000 B.P.

Windmiller groups appear to be firmly established in the Lower Sacramento River Valley by 4,000 B.P., and are routinely interacting with their neighbors. For example, Windmiller groups acquired obsidian from at least two Coast Range and three trans-Sierran sources, haliotis and olivella shells and ornaments from the coast, and quartz crystals from the Sierra foothills. It is hypothesized that the bulk of these materials were acquired through trade. Some of these materials, however, may have been acquired as part of seasonal movements between the Central Valley and the Sierra Nevada foothills. Johnson's work along the edge of the Sierra Nevada foothills at Camanche Reservoir and CA-AMA-56, the Applegate site, further support a link between Windmiller cultures of the Central Valley and cultures of the Sierra Nevada foothills.

Ragir not only investigated the Windmiller Pattern, but also investigated cultures associated with the Middle and Late Horizon. She identified the Cosumnes Culture as representative of the Middle Horizon, based on excavations at CA-SAC-66. The Middle Horizon is characterized by tightly flexed burials with variable orientation, red ochre stains in burials, distinctive olivella and haliotis beads and ornaments, distinctive charmstones, cobble mortars and evidence of wooden mortars, numerous bone tools and ornaments, large, heavy foliate and lanceolate concave base projectile points made of materials other than obsidian, and objects of baked clay. Middle Horizon cultures are generally quite different from Windmiller, but do continue to

exhibit some of the characteristics of Windmiller such as similar projectile point forms. The similarities in projectile point form may be indicative of cultural continuity and/or functional and adaptational success of particular forms.

The Late Horizon is characterized by the Hotchkiss Culture and spans the time period from 1,500 B.P. to contact. The Hotchkiss Culture primarily represents both local innovation and the blending of new cultural traits introduced into the Central Valley. It is distinguished by intensive fishing, extensive use of acorns, elaborate ceremonialism, social stratification, and cremation of the dead.

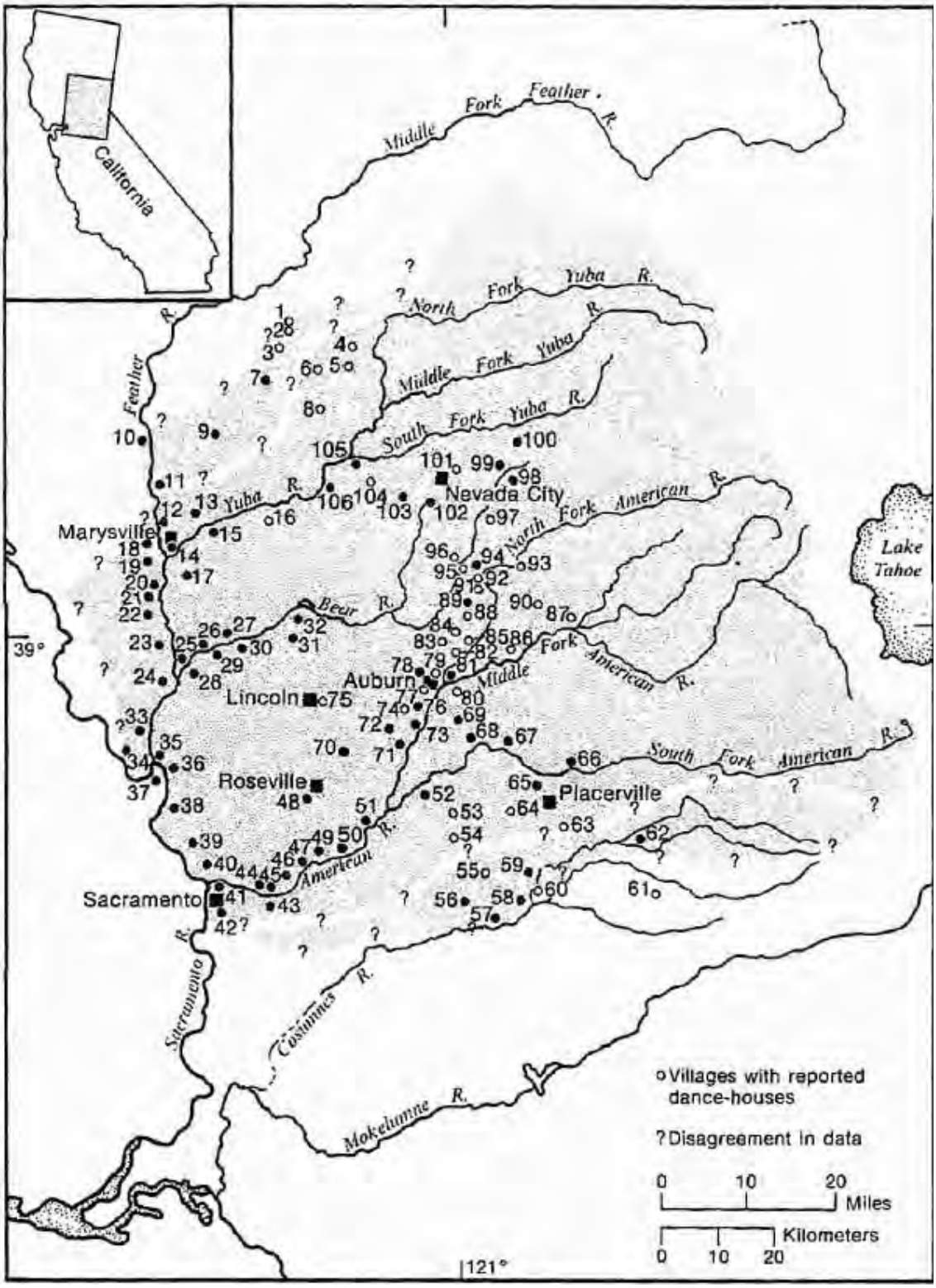
The work of Lillard, Fenenga, Heizer, and Ragir in the lower Sacramento River Valley is significant in the development of archaeology in the Central Valley of California. The research of Ragir is particularly relevant due to its impact on the Central California Taxonomic System (CCTS) originally presented by Beardsley in 1954. The CCTS attempted to organize a cultural sequence for the area of central California from the interior to the coast. Ragir's work corrected and refined aspects of the CCTS and also facilitated future research of its temporal sequence and cultural units. The CCTS and its refinement is a dominant theme in the archaeology of Central California, and research in the Lower Sacramento River Valley has played a significant part in its development. Therefore the SIA and the area surrounding it are not only interesting in terms of its archaeological sites and their constituents, but also in terms of the historical development of archaeology in Central California.

Regional Ethnography

Prior to the arrival of Euroamericans in the region, California was inhabited by groups of Native Americans speaking more than 100 different languages and occupying a variety of ecological settings. Kroeber subdivided California into four subculture areas, Northwestern, Northeastern, Southern, and Central. The Central area encompasses the SIA that is located in Nisenan or Southern Maidu territory. Nisenan are members of the Maiduan Language Family of the Penutian stock.

Figure 5-8 illustrates the extent of the Nisenan territory and shows village locations (and specifies villages with reported dance houses, which signifies importance). Nisenan or Southern Maidu territory extends approximately from the Sacramento River on the east to the Sierra Nevada on the west and from the American River on the south to the North Fork Yuba River on the north. More specifically, the SIA is within Valley Nisenan territory. There are no ethnographic village sites in the SIA, but the village sites of Bakacha (identified as site 70 on Figure 5-5) and Bamuma (identified as site 75 on Figure 5-5) are reported as located near the SIA.

FIGURE 5-8
Nisenan Territory



Source: Wilson and Towne 1978

The basic social and economic group of Nisenan is the family or household unit, with the nuclear and/or extended family forming a corporate unit. Among the Nisenan these groups combined to form tribelets, which were their largest sociopolitical unit. Each tribelet had a chief or headman who exercised political control over all villages within it. Tribelet populations of Valley Nisenan were as large as 500 persons living in permanent villages that were usually located on raised areas to avoid flooding. In 1933 Beals estimates that Nisenan tribelet territory averaged approximately 100 square miles. Within these areas Nisenan practiced seasonal transhumance, moving from one area or elevation to another to harvest plants, fish, and hunt game across contrasting life zones that are in relatively close proximity to each other. Valley Nisenan, however, generally did not range beyond the valley and lower foothills.

Valley Nisenan used a variety of flaked tools (e.g., projectile points and cutting implements) and ground stone tools (e.g., pestles). Obsidian was a highly valued material for tool manufacture, and was usually imported. Both groups also fostered trading relationships with surrounding groups for commodities such as salt, marine shells, and basketry. Other tools and weapons were made of bone and wood, including stirring sticks, mush paddles, pipes, and hide preparation equipment. Cordage was made from plant material and used to construct fishing nets and braided and twined tumplines.

Fishing was a large part of Valley Nisenan survival. Consequently, they used an extensive assortment of fishing tools including spears, cordage lines with bone fishhooks, harpoons with detachable points, stream diversion dams, nets of cordage and basketry, weirs, and an array of fish traps. They also used tule, lashed log, and bark rafts to travel and gain resources. Other specialized food processing and cooking techniques primarily included grinding and leaching of ground acorn and buckeye meal. Acorns, buckeyes, pine nuts, seeds, berries, and meat were routinely processed using bedrock mortars and pestles. A soaproot brush was used to sweep meal into mortar cups and collect flour. Fist-sized, heated stones were used to cook or warm liquid-based foods such as acorn gruel. In addition, plant resources may have been managed by controlled burning for both food (e.g., edible grasses and seed producing plants) and the manufacture of baskets and other useful equipment.

Geoarchaeology

Geoarchaeology uses earth-science perspectives and techniques to interpret artifacts' temporal and spatial contexts and may be used to identify past environments, past human use and/or occupation of a landscape, and the location of buried cultural materials. Past environments, landscapes, and locations of cultural material may be identified by geologic mapping, geomorphic analysis, sediment analysis, pedology (study of soils in their natural environment), and geochemical analysis.

Soils in the SIA consist primarily of Quaternary lake deposits and soils representing the Fiddyment series. The Fiddyment soils in the SIA are composed primarily of Alfisols and Entisols. Alfisols are mineral soils typically located on late Pleistocene or older surfaces. Many alfisols are relatively shallow with a duripan at a depth of about 100 centimeters (cm) below the

surface. Entisols are soils that do not exhibit diagnostic horizons because they are too young, erosion has removed material faster than soil can develop, or new material is added faster than soil develops. These conditions suggest that any archaeological sites within the SIA would likely exhibit surface features and/or artifacts.

Regional History

Spanish exploration of the Central Valley dates to the late 1700s, but exploration of the northern section of the Central Valley and contact with its Native American population did not begin until the early 1800s. At this time, the attention of Spanish missionaries shifted away from the coast and its dwindling Native American population to the establishment of interior missions and conversion of interior populations. This time period also marks the beginning of the decline of Native American populations due to an influx of new Euroamerican diseases and relocation of many groups to missions. Many Native American groups, however, were not willing converts, and there are numerous accounts of groups fleeing missions. Subsequent attempts by the Spanish to return Native Americans to missions led to a series of "Indian Wars" which resulted not only in the loss of life, but also the loss of Native American traditional culture.

The second quarter of the nineteenth century encompasses the Mexican Period (ca. 1821-1848) in California. This period is an outgrowth of the Mexican Revolution, and its accompanying social and political views affected the mission system across California. In 1833 the missions were secularized and their lands divided among the *Californios* as land grants called ranchos. These ranchos facilitated the growth of a semi-aristocratic group that controlled the larger ranchos. The work on these large tracts of land was accomplished by the forced labor of local Native Americans.

Consequently, Valley Nisenan, as well as other groups across California, were forced into a marginalized existence as peons or vaqueros on large ranchos. The closest ranchos to the SIA are in Sacramento County near the southern boundary of Placer County. These ranchos include the Rancho de Paso, the San Juan, and the Río de los Americanos.

Simultaneously with the exploration of the Central Valley, the flanks of the Sierra Nevada trails were being blazed across the plains and mountains facilitating the westward migration of Euroamericans. These early immigrants to California are typified by groups such as the 1841 Bartleson-Bidwell party and the 1844 Stevens-Murphy party. The commencement of the Mexican-American War in 1846 also affected the exploration and development of California, including the identification of new trails across the Sierra Nevada. The exploits of the Mormon Battalion and the establishment of the Mormon Emigrant Trail across the Sierra Nevada highlight these activities.

The discovery of gold at Sutter's Mill in Coloma in 1848 was the catalyst that caused a dramatic alteration of both Native American and Euroamerican cultural patterns in California. Once news of the discovery of gold spread, a flood of Euroamericans entered the region, and gravitated to the area of the "Mother Lode." Initially, the Euroamerican population grew slowly but soon

exploded as the presence of large deposits of gold was confirmed in the Sacramento area. The population of California quickly swelled from an estimated 4,000 Euroamericans in 1848 to 500,000 in 1850. Sacramento, established in 1848 by John A. Sutter, also grew in population and was incorporated as a city in 1850. The discovery of gold and the large influx of Euroamerican immigrants had a positive effect on the growth and economic development of Sacramento and the surrounding area, but a negative effect on Native American cultures. Indeed, the discovery of gold in California marked the beginning of a relatively rapid decline of both Native American populations and culture.

The latter half of the nineteenth century witnessed an ongoing and growing immigration of Euroamericans into the area, an influx also accompanied by regional cultural and economic changes. These changes are highlighted by the development of Sacramento and also cities and towns in Placer County (formed in 1851), such as Auburn, Roseville, Rocklin, and Lincoln. These Placer County cities were associated with expanding business opportunities related to either gold mining, agriculture, or the expansion of the railroad.

Rocklin became an important hub along the Central Pacific Railroad in 1864 and was incorporated as a city in 1893. Subsequently, in 1906 the major railroad facilities at Rocklin, which had become part of the Southern Pacific Railroad system, were relocated to Roseville. Roseville quickly expanded with the relocation of the facilities and was incorporated as a city in 1909. Similarly to Rocklin and Roseville, the origin and development of Lincoln is related to the construction of a railroad. The original Lincoln townsite was surveyed and laid out in 1859 by Theodore Judah along the proposed line of the California Central Railroad. In addition, Rocklin and Lincoln experienced significant economic development because of an expansion of granite quarrying activity and the discovery of clay deposits very suitable for pottery manufacture. Granite quarried in the Rocklin area was sent to San Francisco for construction of the state capitol and other buildings and firms such as of Gladding, McBean & Co. were established in Lincoln to exploit the local clay deposits.

The economic expansion and development of western Placer County continued through the 20th and into the 21st century. Today, the SIA and surrounding area in western Placer County are witnessing extensive residential and commercial development.

Archaeological and Historical Resources

Archaeological and historical investigations included a records search, archival research and geoarchaeological investigations. A records search at the NCIC for the SIA identified that approximately 90 percent of the area is previously surveyed (Table 5-5) and that it includes 17 prehistoric and historic archaeological sites and four isolated prehistoric artifacts (Tables 6-6 and 6-7). Archival research identified that there are no ethnographic village sites in the SIA, but that Native American occupation of the area typically occurred along watercourses. (Figure 5-3 "PCCP Stream System" in Section 5.2 shows the watercourses within the SIA.) Geoarchaeological investigations for the SIA indicate that the area generally exhibits a low sensitivity for the presence of buried deposits of cultural resources.

TABLE 5-5 CULTURAL RESOURCES SURVEYS[1] Sunset Industrial Area		
Date	**Author(s)/Affiliation**	**Title**
1982	Henry Bass, Caltrans District 3	First Addendum Archaeological Survey Report for the Proposed Roseville Bypass Project, 03-Pla-65/80, 03207-242900
1989	Archeo-Tec	An Archaeological Surface Reconnaissance of the Stanford West Property, Placer County, CA
1989	Susan Lindström	A Cultural Resources Evaluation of the Sphere of the City of Lincoln, Placer County to Include the Ferrari Ranch/Southeast Lincoln Project and the Lincoln Crossing Project
1991	Susan Lindström	A Cultural Resources Surface Survey of the Stanford Ranch West Project Involving 690 Acres Between Roseville and Lincoln, Placer County
1994	Peak & Associates	Cultural Resource Assessment of the Diamond Creek Property (APN 17-110-065) Northwest Roseville Vicinity, Placer County, CA
1995	PAR Environmental Services, Inc.	Cultural Resources Investigation for the Villages at Blue Oaks, Phase One, Placer County, CA
1999	Mitchell R. Childress, ECORP Consulting, Inc.	Cultural Resources Assessment Walaire 195 Development Tract Placer County, CA
2001	PAR Environmental Services, Inc.	Cultural Resources Investigation of the Westpark/Fiddyment Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, CA
2002	PAR Environmental Services, Inc.	Historical Evaluation of the Fiddyment Ranch Road, Placer County, CA
2002	David Wilcox and Robert J. Jackson, Pacific Legacy, Inc.	Archaeological Survey Report for Wildlands, Inc. Aitken Ranch Project Area, Placer County, CA
2005	Peak & Associates	Determination of Eligibility and Effect for the John D. Vincent Vernal Pool Reserve (Brace Property), Placer County, CA
2007	ECORP Consulting, Inc.	Cultural Resources Evaluation Report Toad Hill Ranch Mitigation Bank, Placer County, CA
2008	ECORP Consulting, Inc.	Cultural Resources Survey Amoruso Property Placer County, CA
2008	ECORP Consulting, Inc.	Cultural Resources Survey Mourier West Placer County, CA
2009	ECORP Consulting, Inc.	Cultural Resources Survey and Evaluation Skover Property Placer County, CA

[1]The table is not a comprehensive list of surveys. The table only lists larger scale investigations that cover a large part of the SIA. There are additional small scale surveys in the SIA not presented in the table.

Source: Records search at the North Central Information Center conducted on March 17. 2015

TABLE 5-6 PREHISTORIC AND HISTORIC SITES Sunset Industrial Area			
Site Number and Trinomial	**Date Recorded[1]**	**Author(s)/Affiliation**	**Site Description**
P-31-16 (CA-PLA-1354)	2003	Jensen Archaeological Services, Inc.	Prehistoric lithic scatter and historic structure remains
P-31-17-H	1978	Betty Flynn, ARS	Historic stone alignments
P-31-272	1975	Peak & Associates	Light scatter of stone tools and fractured rock
P-31-273 (CA-PLA-147)	1999	Elizabeth Derr, Cultural Resources Unlimited	Light scatter of ground stone artifacts and lithics
P-31-274	1975	Peak & Associates	Fire-cracked rock, manos, and flakes
P-31-1250	1995	Peak & Associates	Bedrock mortar and historic site
P-31-1702	1997	Elizabeth Derr, Cultural Resources Unlimited	Historic ranch
P-31-1405 (CA-PLA-1086)	1989	Unknown	Scatter of historic artifacts
P-31-1424 (CA-PLA-1104)	1989	Archeo-Tec	Scatter of ground stone and lithics
P-32-2647	2005	ECORP Consulting, Inc.	Historic ranch
P-31-2860 (CA-PLA-1979-H)	2004	Peak & Associates	Historic machinery
P-31-2655 (CA-1874-H)	2006	Far Western Archaeological Resources, Inc.	Scatter of historic artifacts
P-31-3155 (CA-2179-H)	2007	ECORP Consulting, Inc.	Foundation pads
P-31-3156 (CA-2180-H)	2007	ECORP Consulting, Inc.	Water pump and pipes
P-31-3157	2007	ECORP Consulting, Inc.	Foundation pads, water pump, and pipes
P-31-3158	2007	ECORP Consulting, Inc.	Water pump and pipes
P-31-3500	2007	ECORP Consulting, Inc.	Historic machinery

[1]Date identifies most recent site record

Source: Records search at the North Central Information Center conducted on March 17. 2015

TABLE 5-7 ISOLATED ARTIFACTS Sunset Industrial Area			
Isolate Number	**Date Recorded**	**Author(s)/Affiliation**	**Site Description**
P-31-18	1979	Betty Flynn, ARS	2 ground stone tools
P-31-36	1985	Archaeological Study Center, Sacramento State University	Mano
P-32-1703	Unknown	Unknown	Mano

Source: Records search at the North Central Information Center conducted on March 17. 2015

In summary, the SIA generally exhibits a low sensitivity for the presence of archaeological and historical resources. Regardless, regional archaeological and ethnographic information indicate that areas within the SIA adjacent to watercourses should be considered sensitive for the presence of buried deposits of prehistoric archaeological resources.

Sacred Lands Search

The sacred lands search conducted by the NAHC did not identify any significant cultural resources or areas of cultural significance to the Native American community within the SIA. Parus contacted all groups and/or individuals on the list of interested groups and individuals provided by the NAHC by letter regarding the SIA and requested any information that the parties may have regarding the SIA. No responses have been received regarding the information request for the SIA.

Paleontological Resources

A search of the UCMP paleontological resources database identified 778 paleontological resources in Placer County, but did not identify any paleontological resources in the SIA. Regardless, the geology of the northeast and southeast sections of the SIA includes rocks that are part of the Riverbank Formation (Figure 6-2 in Section 6.1 "Geologic and Seismic Hazards). The Riverbank Formation has yielded significant vertebrate fossils (e.g., mammoth skeletal remains) in other parts of the Central Valley and should be considered sensitive for the presence of paleontological resources.

In summary, the overall sensitivity SIA for the presence of paleontological resources is low. However, the small area of the SIA that includes the Riverbank Formation should be considered sensitive for the presence of paleontological resources.

Regulatory Setting

Federal

National Register of Historic Places (NRHP)

The NRHP is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural engineering, archaeological, or cultural significance at the national, state, or local level. The Section 106 review process for cultural resources under the NRHP is required for any federal action or permit approval associated with a project.

State

California Environmental Quality Act

Under CEQA, public agencies must consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to Public Resources Code (PRC) Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Section 21083.2 requires agencies to determine whether proposed projects would have effects on "unique archaeological resources."

"Historical resource" is a term with a defined statutory meaning (PRC, Section 21084.1 and State CEQA Guidelines, Section 15064.5 [a], [b]). The term embraces any resource listed in or determined to be eligible for listing in the California Register. The California Register includes resources listed in or formally determined to be eligible for listing in the National Register, as well as some California State Landmarks and Points of Historical Interest.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the California Register and are presumed to be historically or culturally significant for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC, Section 21084.1 and California Code of Regulations, Title 14, Section 4850).

Archaeological resources may also qualify as "historical resources," and PRC 5024 requires consultation with the Office of Historic Preservation when a project may affect historical resources located on state-owned land. CEQA requires lead agencies to consider whether projects will affect "unique archaeological resources." PRC Section 21083.2, subdivision (g), states that "'unique archaeological resources' means an archaeological artifact, object, or site

about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized, important prehistoric or historic event or person.

In addition, California law protects Native American burials, skeletal remains and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains. The State CEQA Guidelines also require that a lead agency make provisions for the accidental discovery of historical or archaeological resources, generally.

California Health and Safety Code

California law protects Indian human remains and associated cultural items regardless of their antiquity and provides for the sensitive treatment and disposition of those remains. Section 7050.5(b) of the California Health and Safety Code specifies protocol when human remains are discovered. California Health and Safety Code at Sections 8010-8011 established the California Native American Graves Protection and Repatriation Act (NAGPRA) 2001. The State repatriation policy is consistent with and facilitates implementation of the Federal NAGPRA. The California Act strives to ensure that all California Indian human remains and cultural items are treated with dignity and respect by encouraging voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. The Act also provides a mechanism for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims and obtaining responses to those claims.

Senate Bill 18 (SB 18)

SB 18 (Government Code, Sections 65352.3, 65352.4) requires that, prior to the adoption or amendment of a general plan or specific plan proposed on or after March 1, 2005, a city or county must consult with Native American tribes with respect to the possible preservation of, or the mitigation of impacts to, specified Native American places, features, and objects located within that jurisdiction.

Assembly Bill 52 (AB 52)

AB 52 (Public Resources Code, Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3), which became effective January 1, 2015, specifies that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. The bill requires a lead agency

to consult with a Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

Public Resources Code for Protection of Paleontological Resources

Paleontological resources are classified as non-renewable scientific resources and are protected by state statute (Public Resources Code Chapter 1.7, Section 5097.5, Archaeological, Paleontological, and Historical Sites and Appendix G). No State or local agencies have specific jurisdiction over paleontological resources. No State or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earth moving on state or private land in a project site.

Local

Placer County General Plan

The Placer County General Plan includes Goal 5.D and Policies 5.D.1 through 5.D.12 for the identification, protection, and preservation of significant archaeological, historical, and paleontological resources. In addition, the County General Plan includes Implementation Programs 5.4 to facilitate the development of programs to identify, protect, and preserve significant archaeological, historical, and paleontological resources. Goal 5.D and applicable policies and implementation measures are stated below.

Goal 5.D: To identify, protect, and enhance Placer County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.

- **Policy 5.D.1.** The County shall assist the citizens of Placer County in becoming active guardians of their community's cultural resources.
- **Policy 5.D.2**. The County shall solicit the cooperation of the owners of cultural and paleontological resources, encourage those owners to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.
- **Policy 5.D.3**. The County shall solicit the views of the Native American Heritage Commission, State Office of Historic Preservation, North Central Information Center, and/or the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.
- **Policy 5.D.5.** The County shall use, where feasible, incentive programs to assist private property owners in preserving and enhancing cultural resources.

- **Policy 5.D.6.** The County shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a Countywide cultural resource database, to be maintained by the Division of Museums.
- **Policy 5.D.7.** The County shall require that discretionary development projects are designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.
- **Policy 5.D.8.** The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.
- **Policy 5.D.9.** The County shall use the State Historic Building Code to encourage the preservation of historic structures.
- **Policy 5.D.10.** The County will use existing legislation and propose local legislation for the identification and protection of cultural resources and their contributing environment.
- **Policy 5.D.11.** The County shall support the registration of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark). The County shall assist private citizens seeking these designations for their property.
- **Policy 5.D.12.** The County shall consider acquisition programs (i.e., Placer Legacy Open Space and Agricultural Conservation Program) as a means of preserving significant cultural resources that are not suitable for private development. Organizations that could provide assistance in this area include, but are not limited to, the Archaeological Conservancy, the Native American community, and local land trusts.

Implementation Program 5.4. The County shall prepare, adopt, and implement procedures for review and approval of all County-permitted projects involving ground disturbance and all building and/or demolition permits that will affect buildings, structures, or objects 45 years of age or older.

SECTION 5.6 OIL AND GAS RESOURCES

Existing Conditions

Oil Resources

There are no oil wells within the SIA. Placer County does not produce oil.

Gas Resources

Two gas wells are known to occur in Placer County, one approximately four and a half miles northwest of the SIA and another approximately three miles southwest. Both wells have been inactive since the 1950s. According to the 2013 Annual Report of the State Oil & Gas Supervisor, no gas production occurred in Placer County in 2013.

Methane Gas Extraction

A landfill gas extraction system was installed at the WRSL in 1996 and has been periodically expanded as the landfill has been developed. Most of the collected gas is currently used by a private, third party to produce electricity.

The presence of a landfill gas extraction system at the WRSL substantially reduces the risk of explosion as described in Section 6.5, "Human Hazards."

Regulatory Setting

There are no regulations applicable to the oil and gas resources in the SIA.

SECTION 5.7 OPEN SPACE AND AGRICULTURAL RESOURCES

Existing Conditions

Most land in the SIA is currently used either for open space or agriculture. Open space within the SIA is in the form of conserved lands, agricultural land, and vacant lands. As discussed in Chapter Three, Land Use, of this Existing Conditions Report, the Placer County General Plan designates approximately 41 percent (3,357 acres) of the SIA for agriculture (20-acre minimum parcel sizes in the northeast and 80-acre minimum in the western portion of the planning area). Nearly 160 acres are designated for open space.

Approximately 68 percent (5,583 acres) of the SIA is zoned as "Farm," and 807 acres are zoned for open space.

A substantial amount of the SIA (approximately 70 percent) is currently identified as Important Farmland by the Farmland Mapping and Monitoring Program (FMMP) (Table 5-8). The FMMP divides farmland into the following categories based on their suitability for agriculture:

- **Prime Farmland:** land that has the best combination of physical and chemical characteristics for crop production. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed.
- **Farmland of Statewide Importance:** land other than Prime Farmland that has a good combination of physical and chemical characteristics for crop production.
- **Unique Farmland:** land that does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, but that has been used for the production of specific crops with high economic value.
- **Farmland of Local Importance:** land that is either currently producing crops or has the capability of production, but that does not meet the criteria of the categories above. This farmland category is determined by each county's board of supervisors and a local advisory committee.
- **Grazing Land:** land on which the vegetation is suited to the grazing of livestock.
- **Urban and Built-Up Land:** land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

- **Other Land:** Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

According to the California Department of Conservation, from 1984 to 2012 there was a decrease in Important Farmland and an increase in Grazing Land and Urban and Built-Up Lands (Figures 6-9 and 6-10). Table 5-8 shows the changes in the amount of farmland in the SIA planning area from 1984 to 2012.

TABLE 5-8
FARMLAND ACREAGE
Sunset Industrial Area

Table	1984 (Acres)	2012 (Acres)	Change from 1984 to 2012
Prime Farmland	32	11	-21
Farmland of Statewide Importance	24	0	-24
Unique Farmland	359	180	-179
Farmland of Local Importance	6,751	5,495	-1,256
Subtotal Important Farmland	***6,807***	***5,687***	***-1,120***
Grazing Land	390	1,310	+920
Urban and Built-Up Land	349	1,104	+755
Other Land	267	72	-195
Total	***8,173***	***8,173***	*--*

Source: California Department of Conservation 2015

The SIA includes 720 acres of farmland currently under Williamson Act contract. As shown on Figure 5-10, these properties are located in the northeastern corner of the planning area.

As seen on Figure 5-11, approximately 1,000 acres in the SIA planning area are preserved as permanent open space. Note that the Orchard Creek Conservation Bank is located in an area that is also under Williamson Act contract. In the area between the three existing reserves—Orchard Creek Conservation Bank, Warm Springs Mitigation Bank, and Moore Ranch Conservancy—there is a substantial area (approximately 1,300 acres) being considered for reserve acquisition, including the proposed 798-acre Antonio Mountain Ranch Conservation and Mitigation Bank.

TABLE 5-9 EXISTING RESERVES Sunset Industrial Area	
Table	**Acres**
Orchard Creek Conservation Bank	716
Warm Springs	90
Moore Ranch Conservancy	145
Total	**951**

Source: Placer County 2011

Regulatory Setting

Federal

There are no relevant federal policies or programs related to open space or agricultural land.

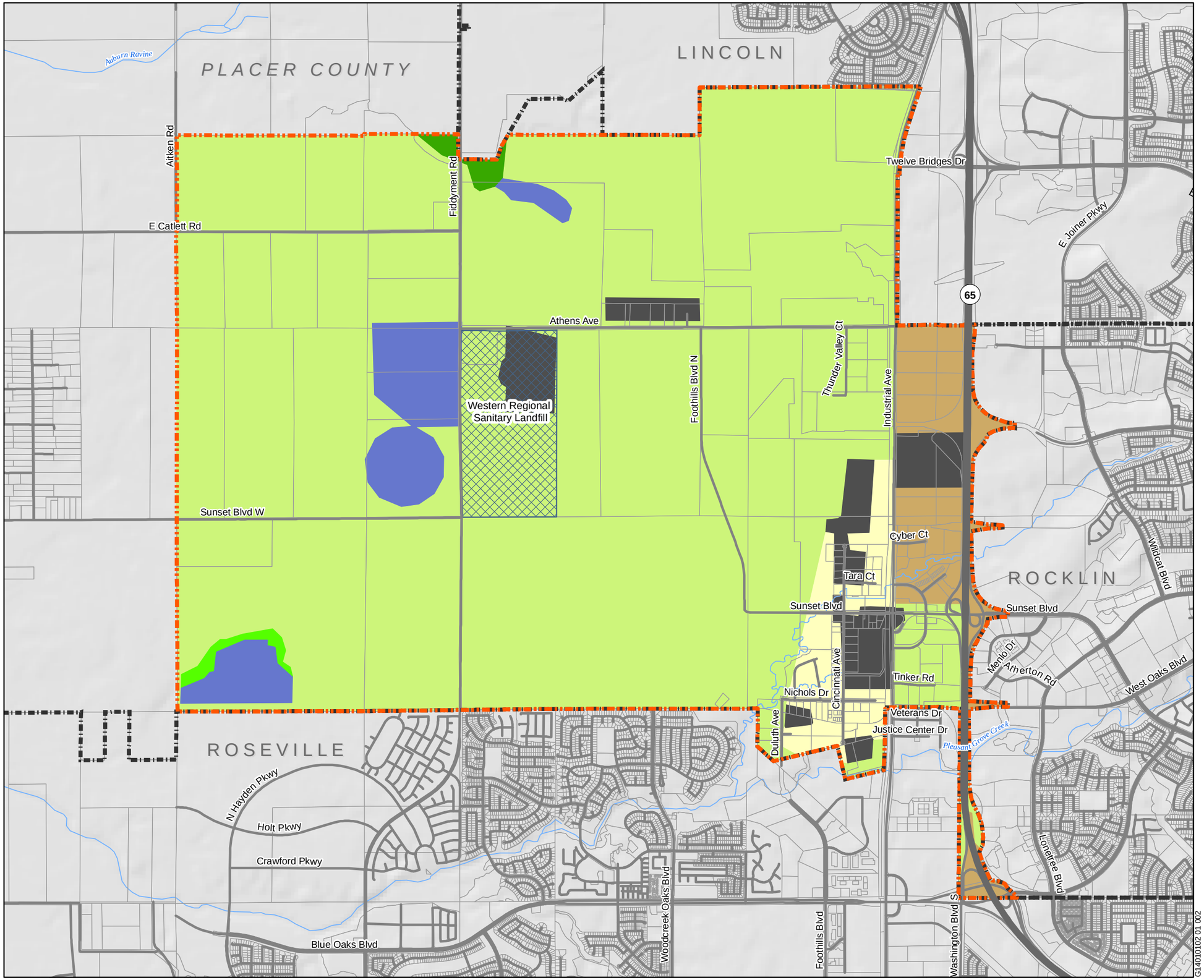
State

California Important Farmland Inventory System and Farmland Mapping and Monitoring Program

The California Department of Conservation, Office of Land Conservation, maintains a statewide inventory of farmlands. These lands are mapped by the Division of Land Resource Protection as part of the FMMP. The maps are updated every two years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance. The categories of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, together, (described above) are defined as "agricultural land" or "farmland" by the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21060.1 (a) and the CEQA Guidelines Appendix G, II [a]).

Sunset Area Plan | Figure 5-9

FMMP (1984)



Planning Area

City Limits

Western Regional Sanitary Landfill

FMMP Categories

- Prime Farmland
- Farmland of Statewide Importance
- Farmland of Local Importance
- Unique Farmland
- Grazing Land
- Urban and Built-Up Land
- Other Land

160 acres
40
10

N

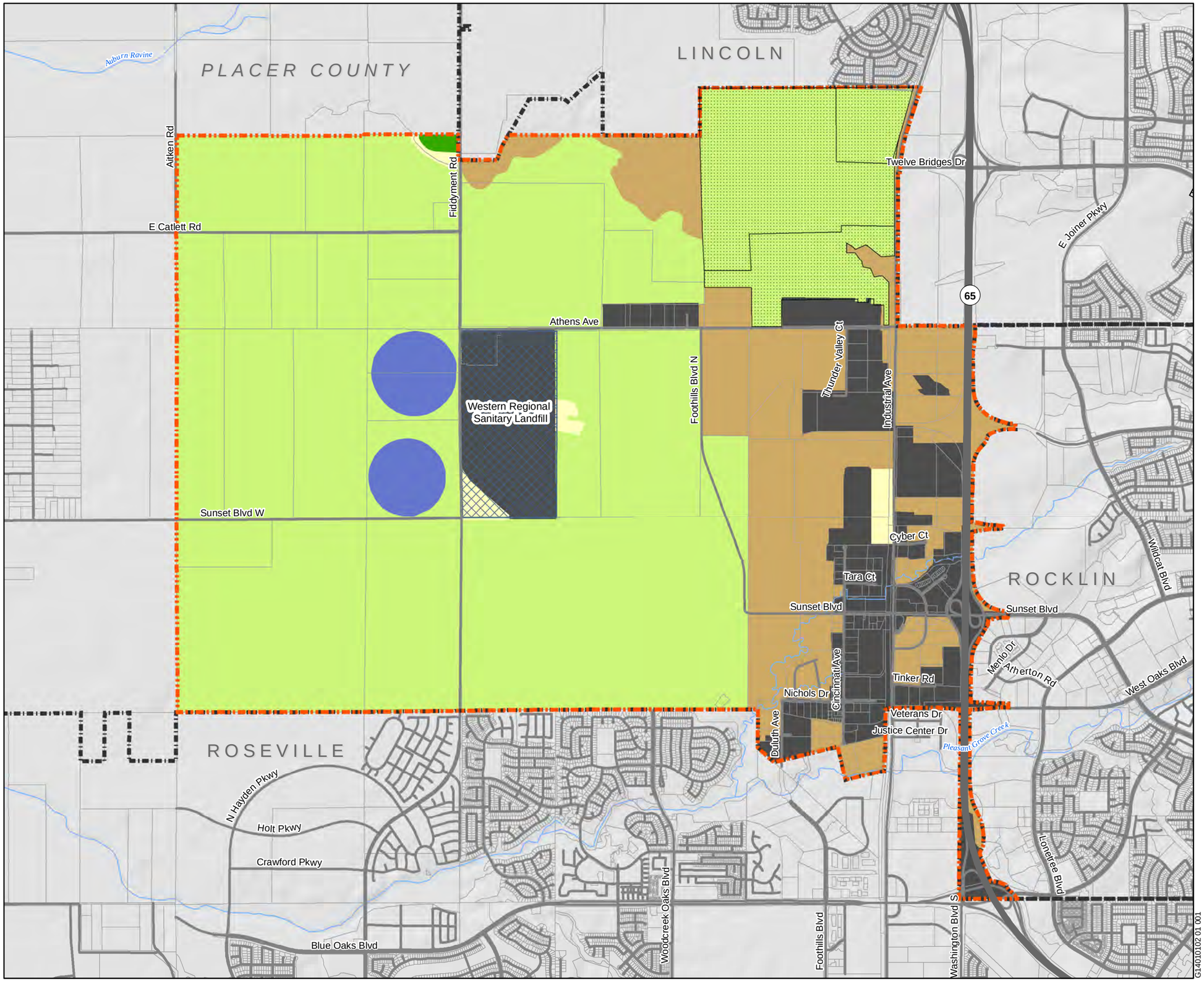
0 0.25 0.5 1 1.5 Miles

Date: 02-23-2015

Source: CA Department of Conservation, 1984

Sunset Area Plan | Figure 5-10

FMMP (2012) and Williamson Act (FY 2013/2014)



Planning Area

City Limits

Western Regional Sanitary Landfill

Williamson Act

FMMP Categories

Prime Farmland

Farmland of Local Importance

Unique Farmland

Grazing Land

Urban and Built-Up Land

Other Land

160 acres

40

10

N

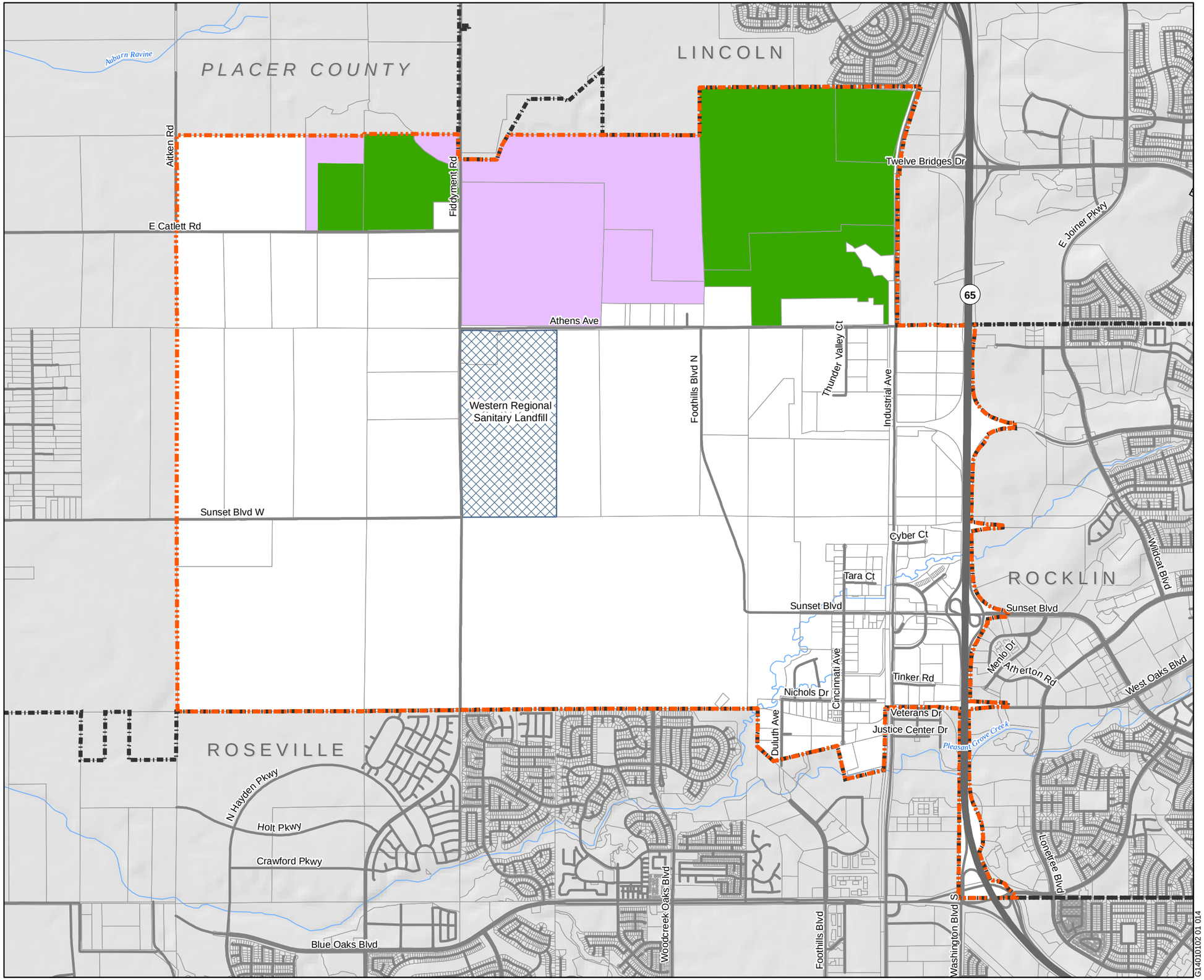
0 0.25 0.5 1 1.5 Miles

Date: 02-23-2015

Source: CA Department of Conservation, 2012 and 2014

Sunset Area Plan | Figure 5-11

Existing and Planned Reserves



Planning Area

City Limits

Western Regional Sanitary Landfill

Reserves

Existing Reserves

Reserve Acquisition Area (2/15 Draft)

160 acres

40

10

N

0 0.25 0.5 1 1.5 Miles

Date: 10-05-2015

Source: Placer County, 2015 (Draft Reserve Map 2-11-15)

California Land Conservation Act of 1965

The California Land Conservation Act of 1965, commonly known as the Williamson Act (California Government Code Section 51200 et seq.), enables local governments to enter into contracts with private landowners for the purpose of promoting the continued use of the relevant land in agricultural or related open space use. In return, landowners receive property tax assessments that are based on farming and open space uses instead of full market value. Local governments receive an annual subvention (subsidy) of forgone property tax revenues from the state via the Open Space Subvention Act of 1971. Amendments to the California State Budget Act of 2009 greatly reduced the Williamson Act Subvention payments, but the Williamson Act Program remains in place and contracts remain in effect.

The Williamson Act empowers local governments to establish "agricultural preserves" consisting of lands devoted to agricultural uses and other compatible uses. Upon establishment of such preserves, the locality may offer to owners of included agricultural land the opportunity to enter into annually renewable contracts that restrict the land to agricultural use for at least 10 years (i.e., the contract continues in effect for 10 years following the first date upon which the contract is not renewed). In return, the landowner is guaranteed a relatively stable tax rate based on the value of the land for agricultural/open space use only, unaffected by its development potential.

Local

Placer County General Plan

The Placer County General Plan contains the following policies related to agricultural resources that may be applicable to the project:

Part I: Land Use/Circulation Diagrams and Standards

- **Agriculture/Timberland Buffers**. These buffer zones are required to separate urban uses (particularly residential) from lands designated Agriculture or Timberland on the Land Use Diagram, where noise from machinery, dust, the use of fertilizers and chemical sprays, and other related agricultural/timber harvesting activities would create problems for nearby residential and other sensitive land uses. These buffers also serve to minimize disturbance of agricultural operations from nearby urban or suburban uses, including trespassing by nearby residents and domestic animals.

Goals and Policies

- **Policy 1.G.3.** The County shall support the development/relocation of recreation/sports/fair complex ranging in size from 100 to 300 acres in the area generally west of Rocklin between Roseville and Lincoln. The location should recognize appropriate environmental, circulation, and infrastructure constraints.

- **Policy 1.H.4.** The County shall allow the conversion of existing agricultural land to urban uses only within community plan or specific plan areas, within city spheres of influence, or where designated for urban development on the General Plan Land Use Diagram.
- **Policy 1.H.5.** The County shall require development within or adjacent to designated agricultural areas to incorporate design, construction, and maintenance techniques that protect agriculture and minimize conflicts with adjacent agricultural uses, except as may be determined to be necessary or inappropriate within a Specific Plan as part of the Specific Plan approval.
- **Policy 1.H.6.** The County shall require new non-agricultural development immediately adjacent to agricultural lands to be designed to provide a buffer in the form of a setback of sufficient distance to avoid land use conflicts between the agricultural uses and the nonagricultural uses, except as it may be determined to be unnecessary or inappropriate within a Specific Plan as part of the Specific Plan approval. Such setback or buffer areas shall be established by recorded easement or other instrument, subject to the approval of County Counsel. A method and mechanism (e.g., a homeowners association or easement dedication to a non-profit organization or public entity) for guaranteeing the maintenance of this land in a safe and orderly manner shall be also established at the time of development approval.
- **Policy 1.I.1.** The County shall require that significant natural, open space, and cultural resources be identified in advance of development and incorporated into site-specific development project design. The Planned Residential Developments (PDs) and the Commercial Planned Development (CPD) provisions of the Zoning Ordinance can be used to allow flexibility for this integration with valuable site features.
- **Policy 1.I.2.** The County shall require that development be planned and designed to avoid areas rich in wildlife or of a fragile ecological nature (e.g., areas of rare or endangered plant species, riparian areas). Alternatively, where avoidance is infeasible or where equal or greater ecological benefits can be obtained through off-site mitigation, the County shall allow project proponents to contribute to off-site mitigation efforts in lieu of on-site mitigation.

Goal 6.E: To preserve and enhance open space lands to maintain the natural resources of the County.

- **Policy 6.E.1.** The County shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources as open space to the maximum extent feasible. The County shall permanently protect, as open space, areas of natural resource value, including wetlands, riparian corridors, unfragmented woodlands, and floodplains.

- **Policy 6.E.2.** The County shall require that new development be designed and constructed to preserve the following types of areas and features as open space to the maximum extent feasible:
  - High erosion hazard areas
  - Scenic and trail corridors
  - Streams, riparian vegetation
  - Wetlands
  - Significant stands of vegetation
  - Wildlife corridors
  - Any areas of special ecological significance
- **Policy 6.E.3.** The County shall support the maintenance of open space and natural areas that are interconnected and of sufficient size to protect biodiversity sustain viable populations, accommodate wildlife movement, and sustain ecosystems.
- **Policy 6.E.4.** The County shall coordinate with local, state, and federal agencies and private organizations to establish visual and physical links among open space areas. Where appropriate, these open space areas are to be connected by scenic corridors, wildlife corridors, and trails. Dedication of easements shall be encouraged, and in many cases, required as lands are developed and built.

Implementation Programs

- The County should develop and adopt an ordinance requiring the dedication of open space and agricultural lands or payment of mitigation fees to provide and maintain open space and large tracts of economically viable agricultural land. Mitigation fees collected within a particular area of benefit are to be spent within that area of benefit unless it can be demonstrated that no suitable compensatory lands are available within the area of benefit and that available lands are available in a contiguous area of benefit.
- The County shall develop and implement an open space and agricultural conservation program for the protection of natural resources to accomplish the following objectives:
  - Maintain a viable agricultural segment of the economy,
  - Conserve natural features necessary for access to a variety of outdoor recreation opportunities,
  - Retain important scenic and historic areas,
  - Preserve the diversity of plant and animal communities,
  - Protect endangered and other special status plant and animal species, and
  - Separate urban areas into distinct communities, and ensure public safety.

Goal 7.A: To provide for the long-term conservation and use of agriculturally-designated lands.

- **Policy 7.A.1.** The County shall protect agriculturally-designated areas from conversion to nonagricultural uses.
- **Policy 7.A.2.** The County shall ensure that unincorporated areas within city spheres of influence that are designated for agricultural uses are maintained in large parcel sizes of 10-acre minimums or larger.
- **Policy 7.A.3.** The County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses.
- **Policy 7.A.7.** The County shall maintain agricultural lands in large parcel sizes to retain viable farming units.
- **Policy 7.A.8.** The County shall encourage infill development in urban areas as an alternative to expanding urban boundaries into agricultural areas.
- **Policy 7.A.10.** The County shall facilitate agricultural production by allowing agricultural service uses (i.e., commercial and industrial uses) to locate in agriculturally-designated areas if they relate to the primary agricultural activity in the area. The County shall use the following guidelines to analyze the suitability of a proposed agricultural service use:
    - The use will not adversely affect agricultural production in the area;
    - The use supports local agricultural production;
    - It is compatible with existing agricultural activities and residential uses in the area;
    - The use will not require the extension of sewer or water lines; and,
    - It will not result in a concentration of commercial or industrial uses in the immediate area.
- **Policy 7.A.11.** The County shall support appropriate efforts by public and private conservation organizations to use conservation easements as a tool for agricultural preservation.
- **Policy 7.A.13.** The County shall encourage multi-seasonal use of agricultural lands such as for private recreational development, in order to enhance the economic viability of agricultural operations.

Goal 7.B: To minimize existing and future conflicts between agricultural and non-agricultural uses in agriculturally-designated areas.

- **Policy 7.B.1.** The County shall identify and maintain clear boundaries between urban/suburban and agricultural areas and require land use buffers between such uses where feasible, except as may be determined to be unnecessary or inappropriate within a Specific Plan as part of the Specific Plan approval. These buffers shall occur

on the parcel for which the development permit is sought and shall favor protection of the maximum amount of farmland.

- **Policy 7.B.3.** The County shall consider fencing subdivided lands adjoining agricultural uses as a potential mitigation measure to reduce conflicts between residential and agricultural uses. Factors to be considered in implementing such a measure include:
    - The type of agricultural operation (i.e., livestock, orchard, timber, row crops),
    - The size of the lots to be created,
    - The presence or lack of fences in the area,
    - Existing natural barriers that prevent trespass, and
    - Passage of wildlife.
- **Policy 7.B.4.** The County shall continue to enforce the provisions of its Right-to-Farm Ordinance and of the existing state nuisance law.

Goal 7.C: To protect and enhance the economic viability Placer County's agricultural operations.

- **Policy 7.C.1.** The County shall attempt to improve the financial viability of the agricultural sector of Placer County's economy through actions that have the potential to reduce costs and increase profits.
- **Policy 7.C.2.** The County shall promote agricultural operations that provide a competitive edge to Placer County farmers.
- **Policy 7.C.3.** The County shall support opportunities to promote and market agricultural products grown or processed within Placer County (such as Farmers' Markets) as a part of the economic development activities of local agencies.
- **Policy 7.C.6.** The County shall ensure that land use regulations do not arbitrarily restrict potential agricultural-related enterprises which could provide supplemental sources of income for farm operators.

Goal 7.D: To maximize the productivity of Placer County's agriculture uses by ensuring adequate supplies of water.

- **Policy 7.D.1.** The County shall support efforts to deliver adequate surface water to agricultural areas with deficient water supplies.
- **Policy 7.D.3.** The County should participate with cities and special districts in establishing programs for the agricultural re-use of treated wastewater in a manner that would be economically beneficial to agriculture.

- **Policy 7.D.5.** The County will work with local irrigation districts to preserve local water rights to ensure that water saved through conservation may be stored and used locally, rather than appropriated and used outside of Placer County.
- **Policy 7.D.6.** The County shall encourage the use of reclaimed water where appropriate for agricultural production.

Placer Legacy Open Space and Agricultural Conservation Program

The Placer Legacy Open Space and Agricultural Conservation Program (or Placer Legacy Project) is a program of the County of Placer to protect and conserve open space and agricultural lands in Placer County. The Placer Legacy Project has been developed to implement the goals, policies and programs of the 1994 Placer County General Plan.

The County has determined that it is an objective of the Placer Legacy Project to attempt to create a separation between distinct urban/suburban areas in the County. Such separations could occur between the cities of Placer County, between the unincorporated area and the cities, and between unincorporated suburban/urban areas. Such buffers or separations exist in several areas of the county. For example, along the north edge of the SIA, a permanent buffer exists between the industrial areas to the south in the county and the potential residential areas to the north in the city of Lincoln. This buffer takes two forms: the 100-year floodplain of Orchard Creek, which is designated Open Space, and a wetland mitigation bank, also along Orchard Creek, which traverses the area from east to west. These two buffers will ensure that an open space separation will remain, in perpetuity, up to one mile wide, between the county's industrial areas and the city of Lincoln.

Placer County Conservation Plan

The PCCP is described in detail above under Section 5.3 "Biological Resources."

SECTION 5.8 SCENIC RESOURCES AND ROUTES

Existing Conditions

Overview of Scenic Resources

Visual resources are an important component of the quality of life of any geographic area. As users experience a place, their primary sensory interaction with that place is visual in nature. A wide variety of shapes, colors, and textures forms views, including structures, roadways, waterways, vegetation, geology, and topography. Some of these resources are described below.

"Aesthetic value" refers to the perception of the natural beauty of an area, as well as the elements that create or enhance its visual quality. While aesthetic value is subjective, it is typically included as a criterion for evaluating those elements that contribute to the visual quality that distinguishes an area. Most communities identify scenic resources as an important asset, although what is considered "scenic" may vary according to its environmental setting.

"Scenic resources" can include natural open spaces, topographic formations, and landscapes. Many people associate natural landforms and landscapes with scenic resources, such as oak woodlands, lakes, rivers, streams, and some historical areas. Scenic resources can also include urban open spaces and the built environment. Examples of these would include public parks, public open space, nature centers and preserves, historical resources, and architectural features.

Visual Character and Existing Views

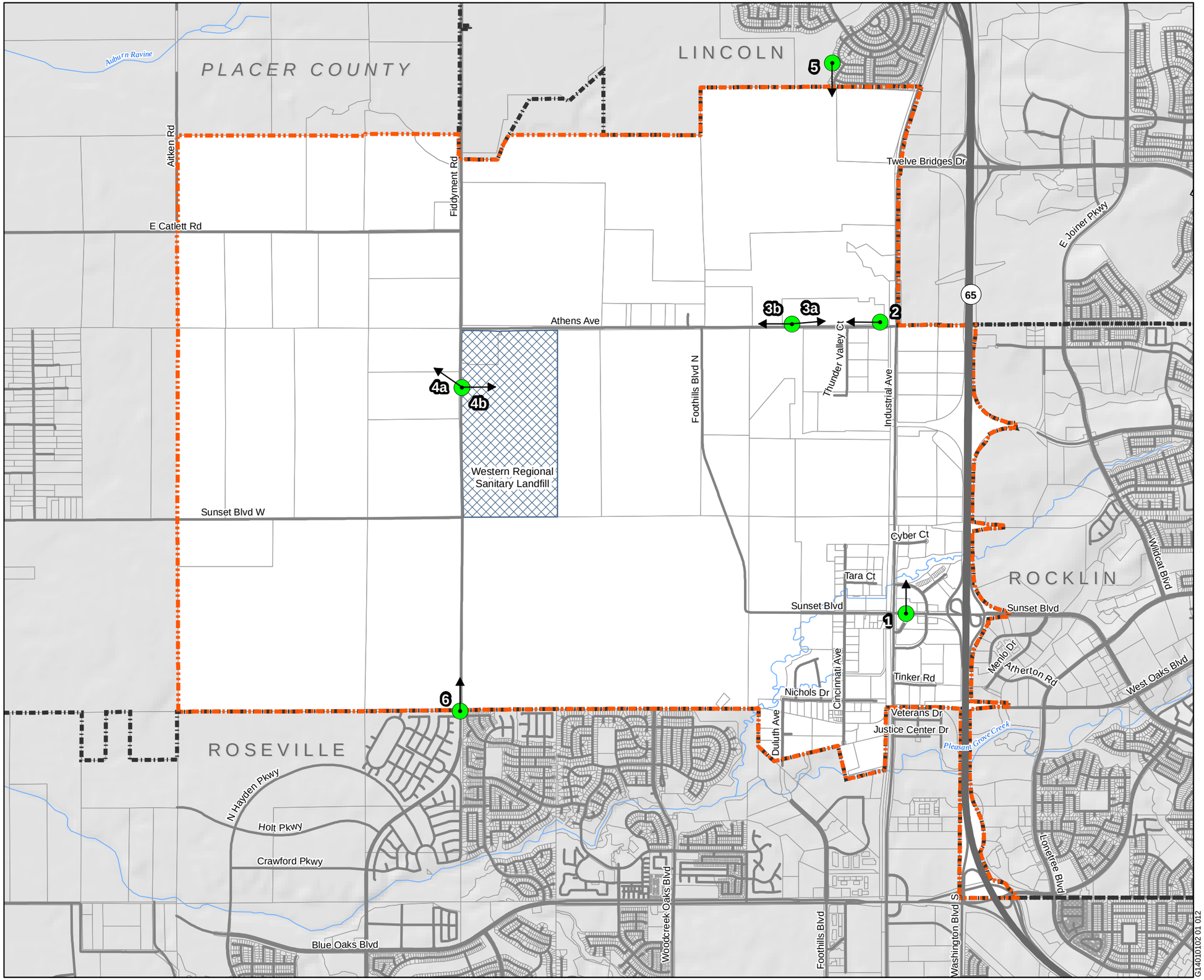
The SIA is characterized by relatively flat terrain, mostly rural in nature, with pockets of urbanized land developed primarily with business park and industrial uses. The lack of tall vegetation allows northeast-facing viewers within the SIA to see portions of the cities of Rocklin and Lincoln in the mid-ground with views of the foothills in the background. Throughout the SIA, small changes in elevation or presence of buildings, tall bushes, or trees, can obscure long-range views. Thunder Valley Casino and Resort and WRSL are the two most prominent visual features within the SIA. The 17-story hotel and casino structure is visible throughout much of the SIA and can also be seen from residential developments north of the SIA. Several tall radio antennae can be seen within the SIA near SR 65; however, the antennae are thin and are not easily noticed when viewing the landscape. A power transmission line transects the SIA northwest to southeast, and the large transmission line towers are highly visible throughout most areas of the SIA. Although some portions of the SIA are characterized by open agricultural land and are of higher quality, many views are dominated by the casino, the landfill, or other urban land uses. These features reduce the quality of the views and visual character of the SIA.

The SIA lacks distinctive scenic resources. There are no distinguishable topographic, geologic, or other natural features. The visual character and views of the SIA are therefore considered to be low to moderate in quality. To better illustrate the visual character and views of the SIA, several photos (provided below) were taken from key viewpoints within and near the SIA (Figure 5-12), and detailed descriptions of these viewpoints are provided.

Viewpoint 1

The area pictured in Viewpoint 1 is within the most urbanized portion of the SIA. The roads in this area are wide with sidewalks and landscaped strips. Most of the buildings are large, single-story, and grouped in business/industrial parks. A railroad traverses the SIA planning area from north to south. Viewers in this area include churchgoers, workers at the businesses, delivery vehicle drivers, commuters traveling through the area, and consumers coming to purchase goods or services. There are no scenic resources in this area and the development obscures long-range views of the foothills, agricultural and open space lands, and other scenic resources.

Sunset Area Plan | Figure 5-12
Viewpoints



Viewpoints

Planning Area

City Limits

Western Regional Sanitary Landfill

160 acres

40

10

N

0 0.25 0.5 1 1.5 Miles

Date: 10-05-2015

Source: Ascent Environmental, 2015

Viewpoints 2 and 3

Thunder Valley Casino Resort, seen at Viewpoints 2 and 3, is a collection of buildings adjacent to large paved parking lots (Viewpoint 2, Viewpoint 3a). Surrounding the resort is undeveloped land. To the west of the resort, along Athens Avenue, is an outdoor industrial area that includes heavy industrial uses, such as cement mixing, a recycling center, pallet sales, and a landscape material supplier. This area is surrounded by trees and other vegetation that screen these uses from viewers at the resort (Viewpoint 3b). Typical viewers in this area include resort workers and visitors, commuters, and delivery vehicle drivers. Surrounding the resort are views of the surrounding rural and agricultural land. While views that show the rural character of the county are valued as scenic resources, the views in this area are not intact because of the resort and industrial uses.

Viewpoint 4

Photos taken at Viewpoint 4 show a typical rural/agricultural view to the west (Viewpoint 4a) and views of the WRSL to the east (Viewpoint 4b). Transmission lines, prominently located along Fiddyment Road, are easily visible from many directions. Viewers in this area include farm staff, workers at the landfill, garbage truck drivers, and commuters. Similar to the views of rural character at Viewpoints 2 and 3, the views of the rural character are broken by the landfill, transmission lines, and other development.

Viewpoints 5 and 6

Two large residential developments are adjacent to the SIA planning area, one to the north and one to the south. Views from both neighborhoods toward the SIA planning area are typified by landscaped strips, paved streets, and sidewalks that abruptly end with mid- and background views of rural/agricultural and undeveloped land (Viewpoints 5 and 6). Viewers in these areas are generally residents. From the northern neighborhoods, the views are into a nature preserve. Residential development disrupts the rural character on one side and transmission lines reduce the intactness of the rural character on the other. The casino is also clearly visible in the background.

Viewpoint 1: From a parking lot off of Industrial Avenue, looking north.

Viewpoint 2: Industrial Avenue at Athens Avenue, looking west toward Thunder Valley Casino Resort.

Viewpoint 3a: Looking east at Thunder Valley Casino Resort from the north side of Athens Avenue.

Viewpoint 3b: Looking west, away from Thunder Valley Casino Resort on the north side of Athens Avenue.

View 4a: Looking northwest from Fiddyment Road.

View 4b: Looking east from Fiddyment Road toward the WRSL.

Viewpoint 5: Looking southeast from the end of Middlefork Court.

Viewpoint 6: Looking north from Fiddyment Road at the edge of the SIA planning area.

Existing Light and Glare

Typical of rural areas, the SIA includes few light sources and emits little nighttime glare, except in the pockets of developed land, which include lighting consistent with industrial and business-park uses, as well as the lighting from the casino/resort. Traffic on SR 65 also generates nighttime glare in the SIA. Outside the SIA, residential and commercial uses within the cities of Lincoln, Roseville, and Rocklin generate light typical of urban development. Sources of daytime glare are limited primarily to light glancing off windows of the resort's high-rise hotel building and car windshields in the resort parking lot.

Viewers and Viewer Sensitivity

The typical viewers in this area include rural residents and residents of adjacent cities, workers, commuters through the area, delivery vehicle drivers, and consumers. Residents and workers in an area tend to have higher sensitivity to visual changes as their presence is most frequent and they are accustomed to the existing views. While drivers and commuters may look for local landmarks and scenery, they are typically less sensitive to visual changes than local residents and workers.

Regulatory Setting

Federal

There are no applicable federal policies related to scenic resources.

State

California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. There are no designated or eligible scenic highways near to the SIA planning area. The nearest eligible State scenic highway is State Route 49, at least 14 miles away.

Local

Placer County General Plan

The Placer County General Plan contains the following policies related to scenic resources that may be applicable to the project:

Goal 1.K: To protect the visual and scenic resources of Placer County as important quality-of-life amenities for County residents and a principal asset in the promotion of recreation and tourism.

- **Policy 1.K.1.** The County shall require that new development in scenic areas (e.g., river canyons, lake watersheds, scenic highway corridors, ridgelines and steep slopes) is planned and designed in a manner which employs design, construction, and maintenance techniques that:
    - Avoids locating structures along ridgelines and steep slopes,
    - Incorporates design and screening measures to minimize the visibility of structures and graded areas, and
    - Maintains the character and visual quality of the area.
- **Policy 1.K.2.** The County shall require that new development in scenic areas be designed to utilize natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes.
- **Policy 1.K.3.** The County shall require that new development in rural areas incorporates landscaping that provides a transition between the vegetation in developed areas and adjacent open space or undeveloped areas.
- **Policy 1.K.5.** The County shall require that new roads, parking, and utilities be designed to minimize visual impacts. Unless limited by geological or engineering constraints, utilities should be installed underground and roadways and parking areas should be designed to conform to the natural terrain.

Goal 1.O: To promote and enhance the quality and aesthetics of development in Placer County.

- **Policy 1.O.1.** Except as otherwise provided in the Design Guidelines of an approved Specific Plan, the County shall require all new development to be designed in compliance with applicable provisions of the Placer County Design Guidelines Manual.
- **Policy 1.O.2.** The County shall require that specific plans include design guidelines for all types of development within the area covered by the plan.
- **Policy 1.O.3.** The County shall require that all new development be designed to be compatible with the scale and character of the area. Structures, especially those outside of village, urban, and commercial centers, should be designed and located so that:
    - They do not silhouette against the sky above ridgelines or hilltops,
    - Roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline,
    - They fit the natural terrain, and

    - They utilize building materials, colors, and textures that blend with the natural landscape (e.g., avoid high contrasts).

- **Policy 1.O.4.** The County shall require that new rural and suburban development be designed to preserve and maintain the rural character and quality of the County.
- **Policy 1.O.5.** The County shall require that new development at entrances to rural communities be designed to include elements such as signage, landscaping, and appropriate architectural detailing to help establish distinct identities for such communities.
- **Policy 1.O.7.** The County shall require that mixed-use areas include community focal points to serve as gathering and/or destination points. Examples of focal points include civic centers, parks, fountains, monuments, and street vistas. On-site natural features, such as wetlands and streams, can also function as focal points.
- **Policy 1.O.8.** The County shall, where appropriate, require new development to provide activity pockets along public sidewalks as pedestrian amenities, including such features as benches, sitting ledges, and mini-parks.
- **Policy 1.O.9.** The County shall discourage the use of outdoor lighting that shines unnecessarily onto adjacent properties or into the night sky.
- **Policy 1.O.10.** The County shall require that in downtowns/village centers the tallest buildings be clustered in the core area and that building heights transition down to the scale of buildings in the surrounding area

SECTION 5.9 KEY TERMS

Water Resources

Basin Plan. Water Quality Control Plan for the Sacramento River and San Joaquin River Basins

BMPs. Best Management Practices

CAW. California American Water Company

CFR. Code of Federal Regulations

CVRWQCB. Central Valley Regional Water Quality Control Board

CTR. California Toxics Rule

CWA. Clean Water Act

DBPs. Disinfection byproducts

DPH. Department of Public Health

EC. Electrical Conductivity

EPA. Environmental Protection Agency

MCLs. maximum contaminant levels

NALs. Numeric action levels

NPDES. National Pollution Discharge Elimination System

PCWA. Placer County Water Agency

REAP. Rain Event Action Plan

SDWA. Safe Drinking Water Act

SWRCB. State Water Resources Control Board

SWPPP. Storm Water Pollution Prevention Plan

TDS. Total dissolved solids

TMDLs. Total maximum daily loads

VOCs. Volatile organic compounds

WPCGMP. Western Placer County Groundwater Management Plan

RWQCB. Regional Water Quality Control Board

Biological Resources

CDFW. California Department of Fish and Wildlife

CEQA. California Environmental Quality Act

CESA. California Endangered Species Act

CPD. Commercial Planned Developments

CWA. Clean Water Act

CNDDB. California Natural Diversity Database

CNPS. California Native Plant Society

CRPR. California Rare Plant Rank

EIR. Environmental Impact Report

ESA. Federal Endangered Species Act

MBTA. Migratory Bird Treaty Act

MSSA. Master Streambed Alteration Agreement

NCCP/HCP. Natural Community Conservation Plan and Habitat Conservation Plan

NCCPA. California Natural Community Conservation Planning Act

NMFS. National Marine Fisheries Service

PCCP. Placer County Conservation Plan

PD. Planned Developments

PGP. Programmatic General Permit

SWRCB. State Water Resources Control Board

USACE. United States Army Corps of Engineers

USDA. United States Department of Agriculture

USGS. United States Geological Survey

USFWS. United States Fish and Wildlife Service

Soils and Mineral Resources

Best Management Practices. Methods or techniques found to be the most effective and practical means of achieving an objective (such as preventing or minimizing pollution) while making the optimum use of resources.

California Geological Survey. The state of California's geologic agency (formerly the California Division of Mines and Geology).

K factor. The susceptibility of soil to erosion.

Plasticity. The degree to which soil can be permanently deformed without rupturing.

Soil Map Unit. A collection of areas defined and named the same in terms of their soil components that make up the basic unit of the Natural Resources Conservation Service's soil maps.

Paleontological, Archaeological, and Historical Resources

Cultural resource. "Cultural resource" is the term used to describe several different types of properties including: prehistoric and historical archaeological sites; architectural properties such as buildings, bridges, and other components of the built environment; and resources of importance to Native Americans.

Historical resource. "Historical resource" is a CEQA term that includes sites, buildings, structures, objects, or districts, each of which may have historical, prehistoric, architectural, archaeological, cultural, or scientific importance, and is eligible for listing or is listed in the California Register of Historical Resources (CRHR).

Traditional Cultural Property (TCP). A TCP is defined as a property eligible for inclusion in the National Register "because of its association with cultural practices or beliefs of a living community that (a) are noted in that community's history, and (b) are important in maintaining the continuity of the community."

Cultural Landscape. A Cultural Landscape is a geographic area, including both cultural and natural resources, associated with an historic event, activity, or person or exhibiting other cultural or aesthetic values. An ethnographic landscape, one type of cultural landscape, is described as a landscape containing a variety of natural and cultural resources that associated people define as heritage resources.

Paleontological resources. "Paleontological resources" is a term used to define several types of fossilized remains including: vertebrate and invertebrate fossils; fossil tracks and trackways; and plant fossils.

Open Space and Agricultural Resources

FMMP. Farmland Mapping and Monitoring Program

PCCP. Placer County Conservation Plan

NCCP. Natural Community Conservation Plan

HCP. Habitat Conservation Plan

Scenic Resources and Routes

Aesthetic value. The perception of the natural beauty of an area, as well as the elements that create or enhance its visual quality.

Scenic resources. Scenic resources can include natural open spaces, topographic formations, and landscapes. Scenic resources can also include urban open spaces and the built environment.