6.0 Cumulative Impacts

6.1 Introduction

In accordance with the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15130 *et seq.*) this Environmental Impact Report (EIR) analyzes the cumulative impacts of the proposed Valley–Ivyglen 115-kV Subtransmission Line Project (proposed Valley–Ivyglen Project, or VIG) and the proposed Alberhill System Project (proposed Alberhill Project, or ASP) in conjunction with other developments that affect or could affect the project area. According to CEQA, a cumulative impact refers to two or more individual effects that are considerable when taken together or that compound or increase other environmental impacts (CEQA Guidelines section 15355). CEQA requires the cumulative impacts discussion to reflect the likelihood that the impacts would occur and their severity if they did occur, but allows the discussion to contain less detail than must be provided for individual impacts (CEQA Guidelines section 15130(b)). To comply with CEQA, a cumulative scenario has been developed for this EIR that identifies and evaluates past, present, and reasonably foreseeable future projects within the cumulative study area that would be constructed or commence operation during the timeframe of activity associated with the proposed projects.

6.2 Methodology

6.2.1 Disclosure of Impacts

To provide full disclosure of cumulative impacts for both proposed projects, this cumulative impacts section contains a separate cumulative impacts analysis for each of the proposed projects. The proposed Valley–Ivyglen Project's cumulative impacts are discussed first, followed by those of the proposed Alberhill Project, for each resource area. The installation of antennas on existing structures at the Serrano Substation and Santiago Peak Communication site as part of the proposed Alberhill Project are not considered further in this section because work at these locations is minimal and short term and would not considerably contribute to a significant cumulative impact.

6.2.2 Cumulative Scenario: Project List and Summary of Projections

In discussing cumulative impacts, the CEQA Guidelines outline two approaches for characterizing the projects that may occur in the vicinity of a proposed project:

1. **Project list:** A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, projects outside the control of the agency (CEQA Guidelines section 15130(b)(1)(A)).
2. **Summary of projections:** A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect (CEQA Guidelines section 15130(b)(1)(B)). This summary can be supplemented with additional information, including a regional modeling program.

This document uses both approaches, depending which is more appropriate for the resource area being analyzed. The approach selected depends on the resource area and the nature and character of expected impacts. The rationale for selecting an approach is provided in the cumulative impacts discussion for each resource area. In general, the cumulative scenario in western Riverside County, whether based on a project list or a summary of projections, is one that demonstrates the rapid development in Riverside

County across all sectors. The scenario also shows the infrastructure developments and upgrades necessary to support population growth and economic development.

6.2.2.1 Project List

The project list approach is used for the cumulative impacts analysis for the following resource areas:

- Aesthetics
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Mineral Resources
- Noise
- Traffic and Transportation

Table 6-1 provides a list of development projects in the vicinity of the proposed project area with the potential to contribute to a cumulative impact. This list includes both approved and pending projects that are anticipated to be either under construction or operational by the time the proposed projects are completed. Projects that have experienced repeated delays and have no scheduled time for implementation are not considered in this analysis when timing of project implementation is needed for the cumulative impacts analysis. Information pertaining to past, present, and reasonably foreseeable future projects were obtained from:

- Riverside County
- City of Lake Elsinore
- City of Menifee
- City of Wildomar
- City of Canyon Lake
- City of Perris
- City of Murrieta
- ~~City of Murrieta~~
- California Public Utilities Commission
- Southern California Edison
- United States Department of the Interior Bureau of Land Management
- United States Forest Service
- California Department of Transportation
- Federal Energy Regulatory Commission

Further, when the project list approach is used, the proposed Alberhill Project is considered part of the cumulative scenario when determining the proposed Valley–Ivyglen Project's contribution to a potentially significant cumulative impact. Likewise, the proposed Valley–Ivyglen Project is considered part of the cumulative scenario when determining the proposed Alberhill Project's contribution to a potentially significant cumulative impact. Figure 6-1 depicts the location and relative size of each proposed project.

6.2.2.2 Summary of Projections

The summary of projections approach is used for the cumulative impacts analysis for the following resource areas:

- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Greenhouse Gases (GHGs)
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

Table 6-1 Cumulative Projects for Project List Approach

Number	Name	Description	Status
1	Alberhill Villages Specific Plan	Development of a master planned community comprising 5,636 residential units, a university village, open space/recreation, and roadways.	Draft EIR was released, with public review ending December 31, 2015.
2	Alberhill Ranch Residential Development	400-acre subdivision, more than 48 acres of public parks, up to 1,401 dwelling units and 1.4 million square feet of commercial and office space.	Construction of the development is ongoing, with many homes and development features (e.g., large park, swim club) completed.
3	Alberhill Ridge	The project would include over 1,000 homes, two commercial centers, parks, and other facilities. Development would occur across about 400 acres.	The vesting tentative map was approved in December 2012. Construction start date is unknown.
4	Hidden Hills	The project would involve development of approximately 511 single-family homes over about 166 acres. The project would also include open space and flood control facilities.	The development agreement was approved in 2010. Construction start date is unknown.
5	Summerly	The project involves construction of about 537 residential units in phases.	Project is being constructed in phase.
6	Oak Creek Canyon	The project would involve construction of 275 single-family residences on 150 acres	Approved, construction is delayed and has not begun as of March 2015
7	Motte Town Center	The project would involve 460,000 square feet of retail space plus parking.	Approved, construction date is unknown.
8	Talavera	The project is a residential development on 64 acres, with 173 homes as well as park space.	The project has been approved, and home builders are being sought.
9	Underwood	The project would include 543 single family homes across 225 acres. The project also contains acreage for a park and open space.	The project has been approved. Construction schedule is unknown.
11	Terracina	The project would include 468 homes across 151 acres. The project would also include park space.	Project has been proposed. Construction schedule unknown.
12	Terramor (formerly Toscana)	890-acre master planned community with up to 1,443 residential dwelling units as well as areas designated for recreational and commercial uses. Some area would be preserved as open space.	Specific Plan Approved. Specific Plan amendment and Tentative Tract Maps are in process.
13	Walmart Lake Elsinore	The project would include a commercial center with a 154,487-square-foot Walmart store and three lots for other retail uses.	Approved in December 2015.
14	Valley South Subtransmission	The project is an SCE proposal to upgrade the region's existing electrical infrastructure and improve its overall electrical reliability.	Draft EIR released January 2016. Construction anticipated to begin March 2018.
15	Colinas del Oro	This housing development would be located off of SR-74 between River Road and Ethanac Road. SR-74 will be improved in the area as part of the development. The project would have about 490 dwelling units as well as commercial development and open space.	The project has been approved.
16	Lake Elsinore Advanced Pump Storage (LEAPS) Project	LEAPS is a proposed 500 MW pumped storage hydroelectricity power project which would be located in the Lake Elsinore area. The project would also consist of a 500-KV transmission line (approximately 12 to 15 miles) to connect to the Alberhill Substation. (Note that if the Alberhill Substation is not constructed, SCE would be required to connect the LEAPS project to the grid in some other way per the contents of the LGIA executed in 2012 between SCE and Nevada Hydro. The cumulative impacts disclosed in this section reflect impacts associated with the LEAPS project if the Alberhill Substation is constructed. For a disclosure of cumulative impacts	The project has a preliminary permit from FERC and an LGIA with SCE; however, the exact route for the 500-KV transmission line associated with this project is unknown. This project is unlikely to be constructed within the timeframe for construction of the proposed projects; therefore, impacts associated with

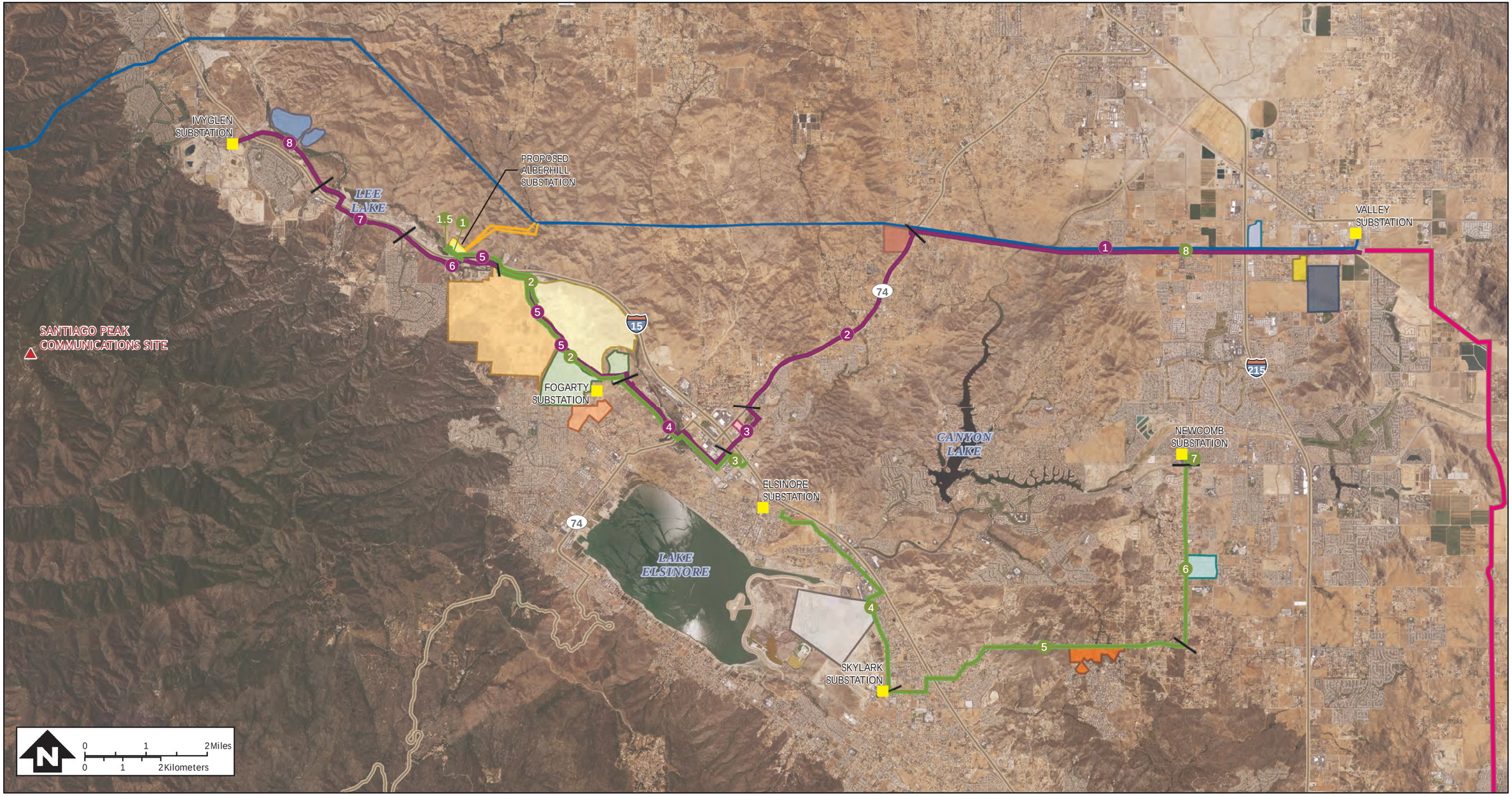
Table 6-1 Cumulative Projects for Project List Approach

Number	Name	Description	Status
		associated with Alternative DD, see Chapter 5.0, Comparison of Alternatives.)	construction are not analyzed.

Sources: City of Lake Elsinore 2012a,b, 2014, 2015a,b,c; City of Menifee 2010; City of Wildomar 2015; County of Riverside 2014a; CPUC 2016; Derrigo Demographic Studies 2013; Foremost Communities 2013; Lee & Associates undated; McAllister 2013; Naiman 2015; Rancon Group 2016; RCTLMA 2014; Shopoff 2007; Summerly Homes 2016; True Life Companies 2015; WD Land 2015; Williams 2015a,b; Nevada Hydro 2017

Key:
EIR Environmental Impact Report
SCE Southern California Edison
SR-74 State Route 74

Path: \\prtbhp1\GIS\SanFrancisco\CPUC\VIG_ASP\Maps\MXDs\Figure6_1_CumulativeProjects.mxd



Source: Riverside County 2012, ESRI 2010, SCE 2011, 2013

- 1 VIG1
- 2 VIG2
- 3 VIG3
- 4 VIG4
- 5 VIG5
- 6 VIG6
- 7 VIG7
- 8 VIG8

- 1 ASP1
- 1.5 ASP1.5
- 2 ASP2
- 3 ASP3
- 4 ASP4
- 5 ASP5
- 6 ASP6
- 7 ASP7
- 8 ASP8

- Existing Substations
- Proposed Alberhill Substation
- Proposed 500-kV transmission lines
- 500-kV Serrano Valley Transmission Line
- Segment begin / end

Cumulative Projects
- Alberhill Ranch Residential Development
- Alberhill Ridge
- Alberhill Villages Specific Plan
- Colinas de Oro
- Hidden Hills
- Motte Town Center
- Oak Creek Canyon
- Summerly
- Talavera
- Terracina
- Terramor (formerly Toscana)
- Underwood
- Walmart Lake Elsinore
- Valley South Subtransmission Line

Figure 6-1

Cumulative Projects

Alberhill and Valley–Ivyglen Projects

Riverside County, California

The following planning documents were reviewed to develop a summary of projections that describes or evaluates conditions contributing to a cumulative effect:

- City of Lake Elsinore General Plan (2011a) and Final Program Environmental Impact Report (EIR) (2011b)
- City of Menifee General Plan (2013a) and Draft EIR (2013b)
- City of Perris General Plan (2005a) and EIR (2005b); Initial Study/Mitigated Negative Declaration for General Plan Housing Element (2013)
- County of Riverside General Plan, as amended (2014b)
- Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) (County of Riverside 2003a)

6.2.2.3 Resources Not Discussed

This analysis does not address land use and planning cumulative impacts. As explained in Section 4.10, "Land Use and Planning," neither proposed project would result in environmental impacts due to a conflict with a land use policy.

6.3 Resource Areas

This section analyzes cumulative impacts for each CEQA resource issue. The analyses describe the approach used (project list or summary of projections) and rationale for choosing the approach. The analyses also define geographic scopes for the cumulative analysis, as these are specific to each resource. Finally, the section analyzes the projects' potentially significant impacts in conjunction with other projects within the geographic scope that may similarly affect each resource area.

6.3.1 Aesthetics and Visual Resources

6.3.1.1 Approach

The cumulative aesthetics and visual resources analysis uses the project list approach. Aesthetic and visual resource impacts are project-specific and highly localized. It is therefore most appropriate to use the project list approach so that aesthetic impacts of actual nearby projects can be taken into account in determining whether there would be significant cumulative aesthetic and visual impacts.

6.3.1.2 Geographic Scope

The geographic scope of cumulative impacts on aesthetics includes all areas where more than one project would be visible with the proposed project in the same public viewshed.

6.3.1.3 Valley–Ivyglen Project

Cumulative Scenario

Table 6-2 presents cumulative projects that form the cumulative scenario for the aesthetic impacts associated with the proposed Valley–Ivyglen Project.

Table 6-2 VIG Cumulative Projects within the Aesthetics Geographic Scope

Valley–Ivyglen Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment VIG1	Alberhill Project (115-kV Segment ASP8), Motte Town Center, Talavera, Valley South Subtransmission Project
115-kV Segment VIG2	Colinas de Oro
115-kV Segment VIG3	Alberhill Project (115-kV Segments ASP2 and ASP3)
115-kV Segment VIG4	Alberhill Project (115-kV Segments ASP2 and ASP3)
115-kV Segment VIG5	Alberhill Project (115-kV Segments ASP1, ASP1.5, ASP2, and Alberhill Substation), LEAPS, Alberhill Village, Alberhill Ranch, Alberhill Ridge
115-kV Segment VIG6	Alberhill Project (115-kV Segments ASP1, ASP1.5, ASP2, and Alberhill Substation), LEAPS)
115-kV Segment VIG8	Terramor
~~115-kV Segment VIG1~~	~~Alberhill Project (115-kV Segment ASP8), Motte Town Center, Talavera, Valley South Subtransmission Project~~
~~115-kV Segment VIG2~~	~~Colinas de Oro~~
~~115-kV Segment VIG3~~	~~Alberhill Project (115-kV Segments ASP2 and ASP3)~~
~~115-kV Segment VIG4~~	~~Alberhill Project (115-kV Segments ASP2 and ASP3)~~
~~115-kV Segment VIG5~~	~~Alberhill Project (Alberhill Substation, 500-kV lines, and115-kV Segments ASP1, ASP1.5, ASP2), Alberhill Village, Alberhill Ranch, Alberhill Ridge~~
~~115-kV Segment VIG6~~	~~Alberhill Project (Alberhill Substation, 500-kV lines, and115-kV Segments ASP1, ASP1.5, ASP2)~~
~~115-kV Segment VIG8~~	~~Terramor~~

Cumulative Impacts

The proposed Valley–Ivyglen Project would have no impact on a designated scenic vista. This proposed project therefore would not contribute to a cumulative impact on a scenic vista.

None of the cumulative projects would be clearly visible at the same time as the proposed project from Interstate (I-15) or State Route 74 (SR-74), which are both Eligible Scenic Highways, with the exception of the LEAPS project. The LEAPS project would be visible near segments VIG 5 and VIG 6 near the entrance of the Alberhill Substation. The remainder~~. All~~ of the cumulative projects are either too far away from I-15 to be clearly visible or are otherwise shielded from the views of drivers on I-15 or SR-74. With the LEAPS project, the Valley–Ivyglen Project could contribute an incremental visual effect that would be cumulatively considerable. However, the design, location and timing of construction of the LEAPS interconnection components are unknown. Therefore, the nature and extent of the significance of the Valley-Ivyglen Project's contribution to a cumulative impact cannot be ascertained and is speculative. In addition, the LEAPS project is unlikely to be constructed within the timeframe for construction of the proposed Valley–Ivyglen Project; therefore, impacts associated with construction are not analyzed. The Valley–Ivyglen Project would not contribute to a cumulative impact with the remainder of the projects listed in Table 6-2.~~There would be no cumulative impact.~~

Several Valley–Ivyglen Project components would be in the same viewshed as cumulative projects (Table 6-2). All of these cumulative projects except those associated with the proposed Alberhill Project are housing developments, some of which may include minor commercial uses and, in at least one case, educational facilities.

Construction of new homes and commercial facilities within large residential developments and in developments that encroach on open space is typical in the region, given the extensive housing construction that has taken place there in recent years. The construction and presence of housing developments are consistent with the existing visual character of the area.

The proposed Valley–Ivyglen Project's visual impact during construction would be similar to construction activities associated with housing developments and therefore would be visually consistent with other activities in the area. Where the proposed Alberhill Project would overlap with the proposed Valley–Ivyglen Project, the proposed Alberhill Project would only involve stringing conductor on poles installed for the proposed Valley–Ivyglen Project and therefore would not have the appearances of construction activities. The proposed project's construction would therefore not combine with other project construction activities to, on a cumulative level, result in a significant impact to the aesthetic quality of the area.

Construction of the proposed Valley–Ivyglen Project could utilize some nighttime lighting, and conductor may produce glare during operation. While construction of the cumulative projects is likely to take place during the day given the character of the projects (housing and a commercial building), constructed housing, commercial, and educational uses would contain light sources such as street lights, home lights, and sign lights. The large increase in housing in currently undeveloped areas would create a wide-ranging light source that could significantly affect nighttime views. The proposed project's use of nighttime lighting would contribute to this potentially significant cumulative impact. Construction lighting associated with the proposed Valley–Ivyglen Project would be temporary, short term, and oriented to minimize light pollution. The proposed project's contribution to a significant cumulative impact would therefore not be cumulatively considerable.

The presence of large housing developments is visually consistent with the character of the surrounding communities, where significant numbers of houses have been constructed in recent years and are therefore commonplace among open space. Housing developments are visually consistent with the current character of the area; therefore, Motte Town Center, Talavera, Underwood, Alberhill Ranch, Alberhill Ridge, Alberhill Village, Colinas de Oro, and Terramor would not contribute to a cumulative visual impact once they are constructed.

Operation and maintenance of the proposed project would contribute to a cumulative impact only where the proposed Alberhill Project and the LEAPS project would overlap with the proposed Valley–Ivyglen Project and where the Valley South Subtransmission Project is near the proposed Valley–Ivyglen Project. Operation and maintenance of the proposed Valley–Ivyglen Project would take place in the same location as, and within view of, the Alberhill Substation and 115-kV Segments ASP1, ASP1.5, ASP2, ASP3, and ASP8; the LEAPS project; and~~, as well as~~ the Valley South Subtransmission Project. The presence of the proposed Valley–Ivyglen Project (including 115-kV Segments ASP1, ASP1.5, and ASP2) in the vicinity of the Alberhill Substation would significantly change the existing visual character of the area, which currently has high intactness and high to moderate unity of view. Together, these~~the~~ projects, plus the LEAPS project, would detract from these qualities and change the character of the area through addition of human-made industrial structures in the area. This would be a significant impact. The principal visual changes in this area are associated with the proposed Alberhill Project, as that project would include the substation and transmission components, and the LEAPS project, which would include additional 500-kV interconnection components, while the proposed Valley–Ivyglen Project would involve only pole replacement. The proposed Valley–Ivyglen Project's contribution to a significant cumulative impact would therefore not be cumulatively considerable.

Where 115-kV Segment ASP8 and the Valley South Subtransmission Project are located near 115-kV Segment VIG1 (near the Valley Substation), there is already substantial aboveground electric

transmission infrastructure. Addition of several new poles in this area as part of the projects would therefore not cumulatively affect the visual character or quality of the area. 115-kV Segments ASP3 and ASP2 would be located near or in line with 115-kV Segments VIG3 and VIG4. These areas contain electric transmission infrastructure or other overhead utilities (e.g., street lights) where and/or near to where the projects would be located. Their cumulative impact on the visual character of the area would be less than significant.

There would be no nighttime lighting associated with the proposed Valley–Ivyglen Project. This project would not contribute to a cumulative impact related to nighttime lighting.

6.3.1.4 Alberhill Project

Cumulative Scenario

Table 6-3 presents the cumulative projects that form the cumulative scenario for the aesthetic impacts associated with the proposed Alberhill Project.

Table 6-3 ASP Cumulative Projects within the Aesthetics Geographic Scope

Alberhill Project Component	Cumulative Projects within the Geographic Scope
Alberhill Substation, 115-kV Segment ASP1, ASP1.5, and ASP2	Valley–Ivyglen Project (115-kV Segment VIG5 and VIG6), LEAPS~~)~~
115-kV Segment ASP2	Valley–Ivyglen Project (115-kV Segment VIG3 and VIG4), Alberhill Village, Alberhill Ranch, Alberhill Ridge
115-kV Segment ASP3	Valley–Ivyglen Project (115-kV Segment VIG3 and VIG4)
115-kV Segment ASP4	Summerly
115-kV Segment ASP5	Oak Creek Canyon
115-kV Segment ASP6	Hidden Hills
115-kV Segment ASP8	Valley–Ivyglen Project (115-kV Segment VIG1)

Cumulative Impacts

None of the cumulative projects would be visible from Lake Elsinore General Plan Vantage Point 1, the one scenic vista point from which part of the proposed Alberhill Project would be visible. Thus, the proposed Alberhill Project would not contribute to a cumulative visual impact related to scenic vistas.

~~The majority~~None of the cumulative projects would not be clearly visible at the same time as the proposed project from I-15 or SR-74, which are both Eligible Scenic Highways.Most of the cumulative projects would be outside of the viewshed of I-15 and SR-74, which are Eligible Scenic Highways. The only cumulative project that would be clearly visible at the same time as the proposed project from I-15 would be the LEAPS project. The remainder~~All~~ of the cumulative projects are either too far away from I-15 to be clearly visible or are otherwise shielded from the views of drivers on I-15 or SR-74. With the LEAPS project, the Alberhill Systems Project could contribute an incremental visual effect that would be cumulatively considerable at the LEAPS point of interconnection with the Alberhill Substation. However, the design, location and timing of construction of the of LEAPS interconnection components are unknown. In addition, the LEAPS project is unlikely to be constructed within the timeframe for construction of the proposed Valley–Ivyglen Project; therefore, impacts associated with construction are not analyzed. Therefore, the nature and extent of the significance of the Alberhill Systems Project's contribution to a cumulative impact cannot be ascertained and is speculative. The Alberhill Systems Project would not contribute to a cumulative impact with the remainder of the projects listed in Table 6-3.~~There would be no cumulative impact related to scenic highways.~~

Several Alberhill Project components would be in the same viewshed as projects in the cumulative scenario (Table 6-3). All of these cumulative projects except the proposed Valley–Ivyglen Project and the

LEAPS project are housing developments, some of which may include minor commercial uses and, in at least one case, educational facilities.

Construction of new homes and commercial facilities within large residential developments and in developments that encroach on open space is a typical sight in the region~~, given the extensive housing construction and development that has taken place there in recent years~~. The construction and presence of housing developments is consistent with the existing visual character of the area, such that the housing projects visible in the same viewshed as the proposed Alberhill Project would not contribute to a cumulative adverse impact to visual character or quality. The proposed project's visual impact during construction would be similar to those of construction activities associated with housing developments and therefore would be visually consistent with other activities in the area. Where the proposed Alberhill Project would overlap with the proposed Valley–Ivyglen Project, the proposed Alberhill Project would only involve stringing conductor on poles installed for the proposed Valley–Ivyglen Project and therefore would not have the appearances of construction activities. The proposed project's construction would therefore not combine with other project construction activities to, on a cumulative level, result in a significant impact to the aesthetic character or quality of the area.

Construction of the proposed Alberhill Project could utilize some nighttime lighting, and conductor may produce glare during operation. While construction of the cumulative projects is likely to take place during the day given the character of the projects (housing and a commercial building), constructed housing, commercial, and educational uses would contain light sources such as street lights, home lights, and sign lights. The large increase in housing in currently undeveloped areas would create a wide-ranging light source that could significantly affect nighttime views. The proposed Alberhill Project's use of nighttime lighting would contribute to this potentially significant cumulative impact. Construction lighting associated with the proposed Alberhill Project would be temporary, short term, and oriented to minimize light pollution. The proposed project's contribution to a significant cumulative impact would therefore not be cumulatively considerable.

The presence of large housing developments is visually consistent with the character of the surrounding communities, where significant numbers of houses have been constructed in recent years and are therefore commonplace among open space. Alberhill Ranch, Alberhill Ridge, Alberhill Village, Summerly, Oak Creek Canyon, and Hidden Hills would therefore not contribute to a cumulative visual impact once they are constructed.

Operation and maintenance of the proposed Alberhill Project would contribute to a cumulative impact only where it would overlap with the proposed Valley–Ivyglen Project and the LEAPS project.~~.~~ Operation and maintenance of the proposed Valley–Ivyglen Project and LEAPS project would take place in the same general location as, and within view of, the Alberhill Substation (Valley–Ivyglen and LEAPS) and 115-kV Segments ASP1, ASP1.5, ASP2, ASP3, and ASP8 (Valley–Ivyglen).~~.~~ The presence of aboveground components of these~~both~~ projects (including ASP 1, ASP1.5, and ASP2) in the vicinity of the substation would significantly change the existing visual character of the area, which currently has high intactness and high to moderate unity of view. Together, the projects would detract from these qualities and change the character of the area through addition of human-made industrial structures in the area. This would be a significant impact. The principal visual changes in this area are associated with the proposed Alberhill Project, as this project would include substation and transmission components, and the LEAPS project, which would include 500-kV transmission components, while the proposed Valley–Ivyglen Project would involve only pole replacement. The proposed Alberhill Project's contribution to a significant cumulative impact would therefore be cumulatively considerable. While mitigation would reduce impacts, as described for Impact VR-3 (ASP), impacts would remain significant even after mitigation. The cumulatively considerable contribution to the visual impacts in the Alberhill Substation area would be significant and unavoidable.

Where 115-kV Segment ASP8 is located near 115-kV Segment VIG1, there is already substantial aboveground electric transmission infrastructure. Addition of several new poles in this area as part of both projects would therefore not cumulatively affect the visual character or quality of the area. 115-kV Segments ASP3 and ASP2 would be located near or in line with 115-kV Segments VIG3 and VIG4. These areas contain electric transmission infrastructure or other overhead utilities (e.g., street lights) where and/or near to where the projects would be located. Their cumulative impact on the visual character of the area would be less than significant.

Operation of the proposed Alberhill Project may involve lighting for security at the substation. As previously discussed, constructed housing, commercial, and educational uses would contain light sources such as street lights, home lights, and sign lights. The large increase in housing in currently undeveloped areas would create a wide-ranging light source that could significantly affect nighttime views. The proposed project's use of lighting at the substation would contribute to this potentially significant cumulative impact. Lighting installed at the proposed substation would conform to Riverside County Ordinance 655, which regulates and specifies criteria for light pollution. The proposed Alberhill Project would be located in an area that requires lighting to be fully shielded, if feasible, and partially shielded in all other cases, as well as focused to minimize light spillage. Maintenance lights would be used only when required for maintenance or emergency repairs that occur at night. The proposed project's contribution to a significant cumulative impact would therefore not be cumulatively considerable.

6.3.2 Agriculture and Forestry Resources

6.3.2.1 Approach

The cumulative agriculture and forestry resources analysis uses the summary of projections approach. Agriculture and forestry resources are often managed at the County level (e.g., most California counties have Farm Bureaus) and therefore analysis at the project list level would not capture an adequately descriptive cumulative scenario. Instead, a summary of projections approach at the County level is more appropriate to characterize potentially cumulative impacts.

6.3.2.2 Geographic Scope

The geographic scope of cumulative impacts on agriculture and forestry resources includes lands designated as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance in Riverside County. As discussed, the geographic scope includes the entirety of Riverside County because agricultural resources are managed at that level

6.3.2.3 Cumulative Scenario

The Riverside County General Plan EIR found that the conversion of Prime, Unique, and Statewide Important Farmland and other agricultural land under the General Plan would be significant and unavoidable (County of Riverside 2003a). The Draft EIR for Riverside County's current General Plan update notes that under the existing General Plan, there would be a 250 percent increase in loss of Prime Farmland to urban and suburban development in unincorporated Riverside County (County of Riverside 2015). Lake Elsinore does not have Farmland within its city limits (City of Lake Elsinore 2011a). The Menifee General Plan buildout would result in conversion of about 522 acres of Farmland to non-agricultural use (City of Menifee 2013a). The City of Perris eliminated agricultural land use designations under its 1991 General Plan (City of Perris 2005b). Given the substantial projected loss of Prime Farmland across the county, there would be a significant cumulative impact related to loss of Farmland.

6.3.2.4 Cumulative Impacts

Valley–Ivyglen Project

The proposed Valley–Ivyglen Project would not impact forest land, timberland, or land zoned as Timberland Production and ~~would~~ therefore would not contribute to cumulative impacts. The proposed Valley–Ivyglen Project would not involve changes that could indirectly result in conversion of Farmland to non-agricultural use or conversion of Forest Land to non-forest use. This section therefore does not further address the proposed Valley–Ivyglen Project's impacts to Farmland, forest land, timber land, and land zoned as Timberland Production.

The proposed Valley-Ivyglen Project would result in permanent conversion of 0.60 acres of Farmland to non-Farmland use. In 2012, there were about 426,226 acres of Important Farmland in Riverside County (CDC 2012). The average annual acreage loss is about 4,883 acres, or about 1.1 percent of Farmland per year. The proposed project's contribution to Farmland conversion would be about 0.005 percent of the annual conversion amount and would therefore not be cumulatively considerable.

Alberhill Project

The proposed Alberhill Project would not impact forest land, timberland, or land zoned as Timberland Production and would therefore not contribute to cumulative impacts. The proposed Alberhill Project would not involve changes that could indirectly result in conversion of Farmland to non-agricultural use or conversion of Forest Land to non-forest use. This section therefore does not further address the proposed Alberhill Project's impacts to Farmland, forest land, timber land, and land zoned as Timberland Production.

The Alberhill Project would result in permanent conversion of 0.05 acres of Farmland to non-Farmland use. In 2012, there were about 196,568 acres of Important Farmland in Riverside County (CDC 2012). The average annual acreage loss is about 4,883 acres, or about 1.1 percent of Farmland per year. The project's contribution to Farmland conversion would be about 0.001 percent of the annual conversion amount. Therefore, the project's contribution to Farmland conversion would not be cumulatively considerable.

6.3.3 Air Quality

6.3.3.1 Approach

The South Coast Air Quality Management District (SCAQMD) applies the same significance thresholds to cumulative impacts as to project-level impacts. The SCAQMD considers impacts that exceed significance thresholds to be cumulatively considerable (SCAQMD 2015). Given that the significance thresholds are based on attainment of air quality standards across a large area, this analysis uses the summary of projections approach via application of SCAQMD significance thresholds.

6.3.3.2 Geographic Scope

The geographic scope for air quality impacts is the air basin in which the proposed projects are located—the South Coast Air Basin—given that air basins are defined for air quality management based on their "similar meteorological and geographic conditions throughout" (CARB 2014a).

6.3.3.3 Valley–Ivyglen Project

Riverside County, the area of the South Coast Air Basin where the proposed Valley–Ivyglen Project would be located, is in nonattainment status for several criteria pollutants:

- National Ambient Air Quality Standards
  - Ozone
  - Particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$)
- California Ambient Air Quality Standards
  - Ozone
  - $PM_{2.5}$
  - Particulate matter less than or equal to 10 microns in diameter (PM_{10})

Nonattainment status is a significant cumulative air quality impact. As discussed in Section 4.3, "Air Quality," Impact AQ-3 (VIG), the proposed Valley–Ivyglen Project would make a cumulatively considerable contribution to PM_{10} and $PM_{2.5}$ emissions that are currently in~~cause~~ non-attainment. Project Commitment J would be implemented, but PM_{10} and $PM_{2.5}$ emissions would still be cumulatively considerable. Mitigation Measures (MM) AQ-1 and MM AQ-3 would be implemented to further reduce PM_{10} and $PM_{2.5}$ emissions, but emissions would still be significant and therefore cumulatively considerable.

6.3.3.4 Alberhill Project

Riverside County, the area of the South Coast Air Basin where the proposed Alberhill Project would be located, is in nonattainment for several criteria pollutants:

- National Ambient Air Quality Standards
  - Ozone
  - $PM_{2.5}$
- California Ambient Air Quality Standards
  - Ozone
  - $PM_{2.5}$
  - PM_{10}

Nonattainment status is a significant cumulative air quality impact. As discussed in Section 4.3, Impact AQ-3 (ASP), the proposed Alberhill Project would make a cumulatively considerable contribution to $PM_{2.5}$, PM_{10}, and volatile organic compounds (VOC) and oxides of nitrogen (NO_X) (ozone precursors). Project Commitment J would be implemented, but $PM_{2.5}$, PM_{10}, VOC, and NO_X emissions would still be cumulatively considerable. MM AQ-1 and MM AQ-2 would reduce NO_X emissions to less than significant. MM AQ-1 and MM AQ-5 would reduce VOC levels to less than significant. MM AQ-1 and MM AQ-3 would reduce $PM_{2.5}$ and PM_{10} emissions, but not to less than significant levels. Thus, construction of the proposed Alberhill Project would result in a cumulatively considerable net increase of PM_{10} and $PM_{2.5}$.

6.3.4 Biological Resources

6.3.4.1 Approach

The cumulative biological resources analysis for this EIR uses the summary of projections approach. The proposed project area is located in a region covered by the Western Riverside County MSHCP, a coordinated planning effort to protect biodiversity in the region. The Western Riverside County MSHCP is a comprehensive, multi-jurisdictional plan that focuses on conservation of 146 species and their associated habitats throughout Western Riverside County's 1.26 million acres over a 75-year time frame.

Therefore, the most appropriate cumulative analysis for this EIR is to use information in the MSHCP to determine if there would be cumulative impacts to biological resources as a result of the proposed projects.

6.3.4.2 Geographic Scope

The geographic scope of cumulative impacts on biological resources includes the Western Riverside County MSHCP planning area, given that conservation and biological resources protection efforts are coordinated at a regional level within the planning area.

6.3.4.3 Cumulative Scenario

The Final EIR/Environmental Impact Statement for the Western Riverside County MSHCP contains projections that describe or evaluate conditions contributing to cumulative biological effects, which were used to identify the cumulative scenario for the proposed Alberhill Project. These projections include:

- Planned Land Use Within Western Riverside County from County and City General Plans;
- Growth forecasts from the Southern California Association of Governments and Western Riverside County Cities; and
- Land use change under a No Project/No MSHCP Alternative.

6.3.4.4 Cumulative Impacts

Valley–Ivyglen Project

Riverside County is expected to experience dramatic residential and commercial development over the next 20 years. Such development would involve many large-scale construction projects that may encroach on biological resources, potentially impacting sensitive communities, special status species, and biological diversity. Urbanization and development will impact the ability of certain plant and animal species to forage, breed, and develop in their natural habitat. The Western Riverside County MSHCP is intended to minimize impacts to Listed Covered Species and Non-Listed Species to the extent feasible and requires development projects undertaken within the plan area to implement mitigation that will reduce their impacts. Given these elements, development within the MSHCP area while the MSHCP is in effect would result in a less than significant cumulative impact to Listed Covered Species, but would result in a significant, unavoidable cumulative impact to Non-Covered Species

As analyzed in this EIR's Section 4.4, "Biological Resources," the proposed Valley–Ivyglen Project would result in a less than significant impact to special status species, riparian habitat and coast live oak woodlands, federally protected wetlands, and migration of native resident or migratory fish or wildlife with the implementation of mitigation. The mitigation measures detailed in the biological resource section require the avoidance and minimization of impacts to special status species and habitat and the implementation of restoration measures for areas that are temporarily disturbed in order for the applicant to become a Participating Special Entity (PSE) to the Western Riverside MSHCP. Because Southern California Edison (SCE) would be a PSE to the Western Riverside County MSHCP, permanent impacts to biological resources would amount to approximately 118 acres of land (Table 2-5). Moreover, planned buildout of the General Plan, as outlined in the MSHCP, would include conversion of 491,300 acres of land to permanent development; for these reasons, the proposed Valley–Ivyglen Project's incremental effects would not be cumulatively considerable.

Alberhill Project

As noted above, Riverside County is expected to experience dramatic residential and commercial development over the next 20 years. Such development will involve many large-scale construction projects that may encroach on biological resources, potentially impacting sensitive communities, special status species, and biological diversity. Urbanization and development will impact the ability of certain plant and animal species to forage, breed, and develop in their natural habitat. The Western Riverside County MSHCP is intended to minimize impacts to Listed Covered Species and Non-Listed Species to the extent feasible and requires development projects undertaken within the plan area to implement mitigation that will reduce their impacts. Given these elements, development within the MSHCP area while the MSHCP is in effect would result in a less than significant impact to Listed Covered Species and Non-Listed Covered Species but would result in a significant, unavoidable cumulative impact to Non-Covered Species.

As analyzed in Section 4.4, "Biological Resources," the proposed Alberhill Project would result in a less than significant impact with mitigation to special status species, riparian habitat and coast live oak woodlands, federally protected wetlands, and migration of native resident or migratory fish or wildlife with the implementation of mitigation. The mitigation measures detailed in the biological resource section require the avoidance and minimization of impacts to special status species and habitat and the implementation of restoration measures for areas that are temporarily disturbed in order for the applicant to become a PSE to the Western Riverside County MSHCP. Because SCE would be a PSE to the Western Riverside MSHCP, permanent impacts to biological resources would amount to approximately 94.9 acres of land (Table 2-5). Moreover, planned buildout of the General Plan, as outlined in the MSHCP, would include conversion of 491,300 acres of land to permanent development; for these reasons, the proposed Alberhill Project's incremental effects would not be cumulatively considerable.

6.3.5 Cultural Resources

6.3.5.1 Approach

The cumulative cultural resources analysis for this EIR uses the project list approach. Cultural resources impacts are project-specific and highly localized. It is therefore most appropriate to use the project list approach so that cultural resources impacts of actual nearby projects can be taken into account in determining whether there would be significant cumulative cultural resources impacts as a result of the proposed projects.

6.3.5.2 Geographic Scope

The geographic scope of cumulative impacts to cultural resources would include all ground-disturbing projects within 100 feet of the proposed project that could impact known or undiscovered cultural resources.

6.3.5.3 Valley–Ivyglen Project

Cumulative Scenario

Table 6-4 lists the cumulative projects that form the cumulative scenario for Valley–Ivyglen cultural resources impacts. The proposed Alberhill Project would overlaps with the proposed Valley–Ivyglen Project along 115-kV Segment ASP2; however, there would be no ground-disturbance in this location as a result of the proposed Alberhill Project and 115-kV Segment ASP2 would not contribute to a cumulative impact to cultural resources in these locations. Therefore, the proposed Alberhill Project is not included in this discussion.

Table 6-4 VIG Cumulative Projects within the Cultural Resources Geographic Scope

Valley–Ivyglen Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment VIG2	Colinas de Oro
115-kV Segment VIG5	Alberhill Village, Alberhill Ranch, Alberhill Ridge
115-kV Segment VIG8	Terramor

This section addresses impacts along the entire lengths of 115-kV Segments VIG2, VIG5, and VIG8 to avoid disclosing precise locations of known cultural resources.

Cumulative Impacts

There are known cultural resources that could be impacted during construction or operation activities associated with 115-kV Segments VIG2, VIG5, and/or VIG8. Development associated with Alberhill Village, Colinas de Oro, Terramor, Alberhill Ranch, and Alberhill Ridge in these areas could also impact known resources through activities such as excavation and demolition of existing structures. There is a potential that these projects could impact the same resources as the proposed Valley–Ivyglen Project. If the affected resources are also eligible, and the impacts cause a substantial adverse change in the significance of the resource, there could be a cumulative significant impact.

The contribution of the proposed Valley–Ivyglen Project to a potentially cumulative significant impact would be minimal. The proposed Valley–Ivyglen Project would involve Project Commitment B, a Worker Environmental Awareness Plan, which would train workers to recognize cultural resources. Further, the proposed project would incorporate several mitigation measures that would further reduce impacts. MM CR-1a and 1b would require avoidance as mitigation and, when avoidance is not feasible, following procedures to ensure that any impacts to eligible historic resources or unique archaeological resources are not substantial and adverse. The proposed project's contribution to any significant impact on known historic resources would therefore not be cumulatively considerable.

The cumulative projects may also significantly impact previously unknown cultural resources. Cumulative impacts would be potentially significant. The proposed project would incorporate measures to reduce impacts to cultural resources. MM CR-2 requires outlining monitoring procedures for ground disturbing activities in areas with moderate and high archaeological sensitivity. ~~MM CR-3 outlines procedures for construction when a resource is discovered.~~ If a resource is discovered, MM CR-1a and 1b would require avoidance as mitigation and, when avoidance is not feasible, following procedures to ensure that any impacts to eligible historic resources or unique archaeological resources are not substantial and adverse. The proposed Valley–Ivyglen Project's contribution to any significant impact on previously unknown historic resources would therefore not be cumulatively considerable.

There are no known special paleontological resources or unique geologic features in the project area. There is a possibility of uncovering paleontological resources along 115-kV Segments VIG2, VIG5, and VIG8 given the paleontological sensitivity of these areas. It follows that the cumulative projects located along these segments may also result in discovery of paleontological resources during excavation and grading activities. There is a possibility, therefore, of a significant cumulative impact. The proposed Valley–Ivyglen Project, however, would be implemented with mitigation measures that would reduce potential impacts. MM CR-4 would require monitoring of paleontologically sensitive areas. MM CR-5 outlines procedures to follow in the case of discovery of a paleontological resource to ensure that any impacts to discovered unique paleontological resources are reduced. The proposed Valley–Ivyglen Project's contribution to any significant impact on previously unknown paleontological resources would therefore not be cumulatively considerable.

There are no known burial sites along 115-kV segments VIG2, VIG5, and VIG8, but there is a potential that any of the cumulative projects may unearth previously undiscovered human remains. Given that statutory and regulatory requirements that outline procedures in such an event would apply to all the projects, the same remains would not be unearthed by multiple projects. There would be no cumulative significant impact.

6.3.5.4 Alberhill Project

Cumulative Scenario

Where the proposed Alberhill Project would occur in the same location as the proposed Valley–Ivyglen Project, the ASP project components would be placed on structures for the VIG project. Thus, there would be no ground-disturbance in these locations as a result of the ASP project and 115-kV segment ASP2 would not contribute to a cumulative impact to cultural resources in these locations. Cumulative impacts along ASP2 are therefore not discussed. Table 6-5 lists cumulative projects that form the cumulative scenario for cultural resources impacts associated with the proposed Alberhill Project.

Table 6-5 ASP Cumulative Projects within the Cultural Resources Geographic Scope

Alberhill Project Component(1)	Cumulative Projects within the Geographic Scope
115-kV Segment ASP4	Summerly
115-kV Segment ASP5	Oak Creek Canyon
115-kV Segment ASP6	Hidden Hills

Note:
(1) 115-kV Segment ASP2 would not require any ground-disturbance activities; and would not contribute to a cumulative impact to cultural resources. Therefore, this component is not included in this discussion.

This section addresses impacts along the entire lengths of ASP4, ASP5, and ASP6 to avoid disclosing precise locations of resources.

Cumulative Impacts

There are known resources that could be impacted during construction or operation activities associated with 115-kV Segments ASP4, ASP5, and/or ASP6. Development in these areas associated with Summerly (ASP4), Oak Creek Canyon (ASP5), and Hidden Hills (ASP6) could also impact known resources through activities such as excavation and demolition of existing structures. There is a potential that these projects could impact the same resources as the proposed Alberhill Project. If the affected resources are also eligible or found to be eligible, and the impacts cause a substantial adverse change in the significance of the resource, there could be a cumulative significant impact.

The contribution of the proposed Alberhill Project to a potentially cumulative significant impact would be minimal. The proposed project would involve Project Commitment B, a Worker Environmental Awareness Plan, which would train workers to recognize cultural resources. Further, the proposed project would incorporate several mitigation measures that would further reduce impacts. MM CR-1a and 1b would require avoidance as mitigation and, when avoidance is not feasible, following procedures to ensure that any impacts to eligible historic resources or unique archaeological resources are not substantial and adverse. The proposed Alberhill Project's contribution to any significant impact on known historic resources would therefore not be cumulatively considerable.

The cumulative projects and the proposed Alberhill Project may also impact previously unknown cultural resources, with impacts potentially being significant in the case that a historic resource or a unique archaeological resource experiences a substantial adverse effect. Cumulative impacts would be potentially significant. The proposed Alberhill Project would incorporate measures to reduce impacts to cultural resources. The proposed project would involve Project Commitment B, a Worker Environmental

Awareness Plan, which would train workers to recognize cultural resources. MM CR-2 requires outlining monitoring procedures for ground disturbing activities in areas with moderate and high archaeological sensitivity. ~~MM CR-3 outlines procedures for construction when a resource is discovered.~~ If a resource is discovered, MM CR-1a and 1b would require avoidance as mitigation and, when avoidance is not feasible, following procedures to ensure that any impacts to eligible historic resources or unique archaeological resources are not substantial and adverse. The proposed Alberhill Project's contribution to any significant impact on previously unknown historic resources would therefore not be cumulatively considerable.

There are no known special paleontological resources or unique geologic features in the project area. There is a possibility of uncovering paleontological resources along 115-kV Segments VIG5 and VIG8, given the paleontological sensitivity of these areas. It follows that the cumulative projects located along these segments may also result in discovery of paleontological resources during excavation and grading activities. There is a possibility, therefore, of a significant cumulative impact. The proposed Alberhill Project, however, would be implemented with mitigation measures that would reduce potential impacts. MM CR-4 would require monitoring of paleontologically sensitive areas. MM CR-5 outlines procedures to follow in the case of discovery of a paleontological resource to ensure that any impacts to discovered unique paleontological resources are reduced. The proposed project's contribution to any significant impact on previously unknown paleontological resources would therefore not be cumulatively considerable.

There are no known burial sites along 115-kV segments ASP4, ASP5, and ASP6, but there is a potential that any of the cumulative projects may unearth previously undiscovered human remains. Given that statutory and regulatory requirements that outline procedures in such an event would apply to all the projects, the same remains would not be unearthed by multiple projects. There would be no cumulative significant impact.

6.3.6 Geology, Soils, and Mineral Resources

6.3.6.1 Approach

The cumulative geology, soils, and mineral resources analysis uses the project list approach. Geology, soils, and mineral resources impacts are project-specific and highly localized. It is therefore most appropriate to use the project list approach so that geology, soils, and mineral resources impacts of actual nearby projects can be taken into account in determining whether there would be significant cumulative geology, soils, and mineral resources impacts.

6.3.6.2 Geographic Scope

The geographic scope of cumulative impacts would include all ground-disturbing projects in the within about 0.1 mile of the proposed project. For geology, soils, and mineral resources impacts of different projects to accumulate, the projects must be close together so that impacts occur in the same location.

6.3.6.3 Valley–Ivyglen Project

Cumulative Scenario

Note that where the proposed Alberhill Project would overlap with the proposed Valley–Ivyglen Project along 115-kV Segment ASP2, there would be no ground-disturbance as a result of the proposed Alberhill Project, and 115-kV segment ASP2 would not contribute to a cumulative impact to cultural resources in these locations. The proposed Alberhill Project is therefore not included in this discussion. Table 6-6 lists

cumulative projects that form the cumulative scenario for proposed Valley–Ivyglen Project geology, soils, and mineral resources impacts.

Table 6-6 VIG Cumulative Projects within the Geology, Soils, and Mineral Resources Geographic Scope

Valley–Ivyglen Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment VIG1	Valley South Subtransmission Project
115-kV Segment VIG2	Colinas de Oro
115-kV Segment VIG3	Walmart Lake Elsinore
115-kV Segment VIG5	Alberhill Village, Alberhill Ranch, Alberhill Ridge
115-kV Segment VIG8	Terramor

Cumulative Impacts

The cumulative projects may have the potential to expose people or structures to seismic risks. However, there is a less than significant potential of the cumulative projects in combination with the proposed Valley–Ivyglen Project to expose people or structures to a substantial adverse risk. Structures and buildings would be constructed consistent with current building codes, which would minimize the potential for severe damage and loss of life. There would not be a significant cumulative impact related to seismic hazards.

All of the cumulative projects would require ground disturbance, with many of them requiring a substantial amount of ground disturbance or grading given their size, which could lead to increased erosion rates. The cumulative projects would each disturb more than 1 acre of land and therefore would have to comply with the National Pollutant Discharge Elimination System (NPDES) program. The NPDES would require the preparation and implementation of Stormwater Pollution Prevention Plans (SWPPPs) for construction activities to ensure the reduction of pollutants during stormwater discharges. Given that the cumulative projects and the proposed Valley–Ivyglen Project would implement standard stormwater pollution prevention mitigation measures to ensure that earthwork activities do not result in substantial erosion off-site, the proposed Valley–Ivyglen Project would make no cumulatively considerable contribution to any significant cumulative impact.

It is likely that the cumulative projects would be located at least partially on an unstable geologic unit or on expansive soil given their sizes and locations. However, the component of the proposed Valley–Ivyglen Project adjacent to the cumulative project would not be located on soils known to be geologically unstable. Additionally, the proposed Valley–Ivyglen Project would incorporate Project Commitment F, which states that the applicant would follow recommendations from a geotechnical study. With this project commitment, the proposed project's contribution to a cumulative impact in this area would not be cumulatively considerable. The proposed Valley–Ivyglen Project would therefore not contribute to a cumulative impact in this area.

The proposed Valley–Ivyglen Project would not utilize a septic system and would therefore not contribute to any cumulative soil impact related to septic systems.

Most of the proposed Valley–Ivyglen Project would be located in MRZ-3 (mineral resources unknown) and therefore would not contribute to impacts on known mineral resources. Some portions of Segments VIG8 and VIG5 are located in MRZ-2 areas, where mineral deposits are present or likely to be present. Alberhill Village, Alberhill Ridge, and Alberhill Ranch are also located in this area at least partially in areas mapped as MRZ-2. The Final Program EIR for the General Plan Update for Lake Elsinore states that compliance with the General Plan policies related to mineral extraction would maintain availability of mineral resources (City of Lake Elsinore 2011b). Given that ground disturbing activities associated with the proposed Valley–Ivyglen Project would occur only where poles would be erected, would not interfere

with ongoing recovery activities, and would not be located in areas where future resource recovery could reasonably occur, the cumulative impact of all of these projects would be less than significant.

6.3.6.4 Alberhill Project

Cumulative Scenario

Where the proposed Alberhill Project would occur in the same location as the proposed Valley–Ivyglen Project, the ASP project components would be placed on structures for the VIG project. Thus, there would be no ground-disturbance in these locations as a result of the proposed Alberhill Project, and 115-kV segment ASP2 would not contribute to a cumulative impact to cultural resources in these locations. Cumulative impacts along ASP2 are therefore not discussed. Table 6-7 lists cumulative projects that form the cumulative scenario for proposed Alberhill Project geology, soils, and mineral resources impacts.

Table 6-7 ASP Cumulative Projects within the Geology, Soils, and Mineral Resources Geographic Scope

Alberhill Project Component(1)	Cumulative Projects within the Geographic Scope
115-kV Segment ASP4	Summerly
115-kV Segment ASP5	Oak Creek Canyon
115-kV Segment ASP6	Hidden Hills

Note:
(1) 115-kV Segment ASP2 would not require any ground-disturbance activities and would not contribute to a cumulative impact to cultural resources. Therefore, this component is not included in this discussion.

Cumulative Impacts

The cumulative projects may have the potential to expose people or structures to seismic risks. However, there is a less than significant potential of the cumulative projects in combination with the proposed Alberhill Project to expose people or structures to a substantial adverse risk. Structures and buildings would be constructed consistent with current building codes, which would minimize the potential for severe damage and loss of life. There would not be a significant cumulative impact related to seismic hazards.

All of the cumulative projects would require ground disturbance, with many of them requiring a substantial amount of ground disturbance or grading given their size, which could lead to increased erosion rates. The cumulative projects would each disturb more than 1 acre of land and therefore would have to comply with the NPDES program. The NPDES would require the preparation and implementation of SWPPPs for construction activities to ensure the reduction of pollutants during stormwater discharges. Given that the cumulative projects and the proposed Alberhill Project would implement standard stormwater pollution prevention mitigation measures to ensure that earthwork activities do not result in substantial erosion off site, the proposed Alberhill Project would make no cumulatively considerable contribution to any significant cumulative impact.

It is likely that the cumulative projects would be located at least partially on an unstable geologic unit or on expansive soil given their sizes and locations. However, the components of the proposed Alberhill Project adjacent to the cumulative project are not located on soils known to be geologically unstable. Additionally, the proposed Alberhill Project would incorporate Project Commitment F, which states the applicant would perform and implement recommendations from a geotechnical study. With this project commitment, the proposed project's contribution to a cumulative impact in this area would not be cumulatively considerable. The proposed Alberhill Project would therefore not contribute to a cumulative impact in this area.

The proposed Alberhill Project would include a restroom in approximately the middle of the substation on an on-site septic system. No other septic systems would be located in the area of the substation septic system, eliminating the potential for cumulative impacts due to septic systems.

None of the ground-disturbing components of the proposed project would be located in an area with known mineral resources; therefore, the proposed Alberhill Project would not contribute to a cumulative impact in this resource area.

6.3.7 Greenhouse Gases

6.3.7.1 Approach

The cumulative GHG analysis for this EIR uses the summary of projections approach. GHGs and their impacts are a global phenomenon and therefore analysis at the project list level would not capture an adequately descriptive cumulative scenario. Instead, a summary of projections approach at the state level is more appropriate to characterize potentially cumulative impacts for the proposed projects.

The CEQA Guidelines address how a lead agency can assess cumulative impacts of projects that emit GHGs (CEQA Guidelines section 15064(h)(3)) as follows:

> A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including, but not limited to . . . regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located.

6.3.7.2 Geographic Scope

The geographic scope of cumulative impacts from GHGs is global; however, state-level projections are used since a substantial amount of GHG reduction programs are undertaken at the state level.

6.3.7.3 Cumulative Scenario

Regional and global development patterns continue to rely on methods and practices that contribute large volumes of GHGs to the atmosphere, and impacts related to GHGs have widespread and potentially very harmful consequences. The increase in GHGs in the atmosphere caused in large part by human activity is now considered a key cause of global climate change. Current scientific research indicates that potential effects of climate change include variations in temperature and precipitation, sea-level rise, impacts on biodiversity and habitat, impacts on agriculture and forestry, and human health and social impacts. As described in the state's Climate Change Scoping Plan of 2008 (CARB 2008), GHG sources in the state collectively result in emissions that are higher than the targets established by Assembly Bill 32, which indicates that GHG emissions in the state continue to contribute to a total significant statewide cumulative impact.

6.3.7.4 Cumulative Impacts

GHG emissions on a global level would result in a significant cumulative impact, as described in the cumulative scenario. Climate change causes impacts such as more hot days, changes in agricultural growing cycles, degraded air quality, increased wildfire danger, and rising sea level (CARB 2014b).

Valley–Ivyglen Project

The proposed Valley–Ivyglen Project would contribute to the significant cumulative GHG impact because it would result in emissions of GHGs. During construction and operation, emissions would be generated by equipment/vehicle usage. The proposed project would comply with regulations related to reduction of GHG emissions from heavy-duty trucks during construction, including the Low Carbon Fuel Standard and, if applicable by the start of the proposed project, "Phase 2" heavy-duty truck GHG standards and other standards and regulations adopted over time.

Given compliance with GHG emissions reduction regulations with specific requirements to lessen the cumulative effects of such emissions, the proposed Valley–Ivyglen Project's contribution to the cumulative significant impact would not be cumulatively considerable.

Alberhill Project

The proposed Alberhill Project would contribute to the significant cumulative GHG impact because it would result in emissions of GHGs. During construction, emissions would be generated by equipment/vehicle usage. During operation, emissions would be generated by equipment/vehicle usage and through sulfur hexafluoride (SF_6) leakage from gas-insulated equipment at the proposed substation.

The proposed Alberhill Project would comply with regulations related to reduction of GHG emissions from heavy-duty trucks during construction, including the Low Carbon Fuel Standard and, if applicable by the start of the proposed project, "Phase 2" heavy-duty truck GHG standards and other standards and regulations adopted over time.

The proposed Alberhill Project would comply with regulations for the reduction of SF_6 emissions that are designed to reduce SF6 emissions from gas insulated switchgear (17 California Code of Regulations [CCR] § 95350), including:

- **17 CCR § 95352:** Sets the maximum annual SF_6 emission rate for active gas insulated switchgear, decreasing to 1.0 percent per year in 2020
- **17 CCR § 95354–55:** Outlines inventory measurement procedures and recordkeeping
- **17 CCR § 95356:** Outlines annual reporting requirements

Given compliance with GHG emissions reduction regulations with specific requirements to lessen the cumulative effects of such emissions, the proposed Alberhill Project's contribution to the cumulative significant impact would not be cumulatively considerable.

6.3.8 Hazards and Hazardous Materials

6.3.8.1 Approach

The cumulative analysis related to hazardous materials for this EIR uses the project list approach to identify impacts. Hazardous materials impacts are project-specific and highly localized. It is therefore most appropriate to use the project list approach so that likely hazardous materials impacts of nearby projects can be taken into account in determining whether there would be significant cumulative hazards and hazardous materials impacts.

The cumulative impacts discussion related to wildfire risk uses the summary of projections approach. Given that wildfires can spread across hundreds or thousands of acres, it is more meaningful to use a larger, countywide approach in assessing cumulative wildfire impacts.

6.3.8.2 Geographic Scope

The geographic scope of cumulative impacts would be the area within 0.1 miles of the proposed project disturbance areas. The limited geographic scope is due to the fact that there is low risk for a hazardous material spill or release as a result of the proposed project. The greatest risk includes spillage of gasoline, diesel fuel, oil, and lubricants during construction. In the event of an accident, none of the aforementioned substances are expected to be released in large quantities or to travel long distances. The geographic scope for wildfires is Riverside County.

6.3.8.3 Summary of Projections Cumulative Scenario (Wildfire)

The 2003 Riverside County General Plan EIR does not address wildfire risk in terms of hazards (County of Riverside 2003a). The 2015 Riverside County General Plan EIR, however, states that Riverside County buildout would place development in areas with high and very high fire hazard (County of Riverside 2015). This buildout would be accompanied by an increase in fire occurrence from an increase in human presence in hazardous areas. The EIR concludes this growth would be a cumulatively considerable increase in fire hazard (County of Riverside 2015). Thus, the cumulative scenario moving forward is that of a cumulative significant impact related to wildfire exposure.

6.3.8.4 Valley–Ivyglen Project

Project List Cumulative Scenario

Table 6-8 lists cumulative projects that form the cumulative scenario for proposed Valley–Ivyglen Project hazards and hazardous materials impacts.

Table 6-8 VIG Cumulative Projects within the Hazards and Hazardous Materials Geographic Scope

Valley–Ivyglen Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment VIG1	Valley South Subtransmission Project, Talavera, Mott Town Center
115-kV Segment VIG2	Colinas de Oro
115-kV Segment VIG3	Walmart Lake Elsinore
115-kV Segment VIG4	Alberhill Project(115-kV Segment ASP2)
115-kV Segment VIG5	Alberhill Project (115-kV Segment ASP2) , Alberhill Village, Alberhill Ranch, Alberhill Ridge
115-kV Segment VIG8	Terramor

Cumulative Impacts

All of the projects in the project list cumulative scenario would involve the use of hazardous materials in some form and to some degree. All projects would involve the use of heavy equipment and vehicles, which would introduce various fuels and oils and other associated materials into the project area. There is an intrinsic risk of spill of these materials during construction activities and, for the proposed Alberhill Project, during the post-construction phase. Any of these nearby projects being constructed at the same time as the proposed project would have to adhere to federal, state, and local regulations regarding handling, use, and disposal of hazardous materials. The cumulative projects would not have a significant impact on the routine transport, use, and disposal of hazardous materials and the proposed Valley–Ivyglen Project would not considerably contribute to create a cumulative significant impact.

The cumulative projects are not within 0.325 miles of a school that is within 0.25 miles of the proposed Valley-Ivyglen Project. Cumulative projects would not have a significant impact on release of hazardous

materials within 0.25 miles of a school. Proposed Valley-Ivyglen Project would not considerably contribute to a cumulatively significant impact.

The proposed Valley–Ivyglen Project would have no impact on safety hazards from an airport land use plan or private airstrip; therefore, the proposed Valley–Ivyglen Project would not contribute to a cumulatively considerable impact.

No emergency or evacuation routes are identified in the Riverside County General Plan, Riverside County Emergency Operations Plan (EOP), or Local Hazard Mitigation Plan, the City of Lake Elsinore General Plan, the City of Perris General Plan, and the City of Menifee Draft General Plan in the vicinity of any of component of the proposed Valley–Ivyglen Project (County of Riverside 2006, 2008, 2012; City of Perris 2005a; City of Lake Elsinore 2011a; City of Menifee 2013a). The proposed Valley–Ivyglen Project would have no cumulative impact due to interference with an adopted emergency response plan or emergency evacuation plan.

The proposed Valley–Ivyglen Project's contribution to the significant cumulative fire risk impact would be mitigated through adhering to rules and regulations and standards. Additionally, ~~MM HZ-5~~ MM HZ-4 would require preparation and implementation of a Fire Control and Emergency Response plan to reduce the risk of fire and impacts that would result should a fire occur. The proposed Valley–Ivyglen Project's impacts on wildfire exposure would not be cumulatively considerable.

6.3.8.5 Alberhill Project

Project List Cumulative Scenario

Table 6-9 lists the cumulative projects that form the cumulative scenario for the proposed Alberhill Project's hazards and hazardous materials impacts.

Table 6-9 ASP Cumulative Projects within the Hazards and Hazardous Materials Geographic Scope

Alberhill Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment ASP2	Valley–Ivyglen Project (115-kV Segment VIG4 and VIG5), Alberhill Village, Alberhill Ranch, Alberhill Ridge
115-kV Segment ASP4	Summerly
115-kV Segment ASP5	Oak Creek Canyon
115-kV Segment ASP6	Hidden Hills

Cumulative Impacts

All of the projects in the project list cumulative scenario would involve the use of hazardous materials in some form and to some degree. All projects would involve the use of heavy equipment and vehicles during their construction, which would introduce various fuels, oils, and other associated materials into the project area. There is an intrinsic risk of spill of these materials during construction. Any of these nearby projects being constructed at the same time as the proposed project would have to adhere to federal, state, and local regulations regarding handling, use, and disposal of hazardous materials. Furthermore, both the Alberhill Project and Hidden Hills project are within 0.25 miles of the Menifee Valley Middle School. Cumulative impacts related to the routine transport, use, and disposal of hazardous materials, including within 0.25 miles of a school and the proposed Alberhill Project, would not considerably contribute to create cumulative significant impact.

While there are known leaking underground storage sites within 100 feet of the 115-kV Segment ASP4, neither site is in an area where it could be impacted by any of the projects in the project list cumulative scenario. There would be no cumulative impact.

None of the projects in the project list cumulative scenario except the proposed Valley–Ivyglen Project would pose a safety hazard to people living or residing within 2 miles of a public or private airport because the projects are not close enough to an airstrip to result in a hazardous condition for residents or workers and because they are residential projects and do not contain components tall enough to interfere with air traffic. While the proposed Alberhill Project would involve placement of tall structures, the area where this project would overlap with the proposed Valley–Ivyglen Project would be in an area where the poles are associated with the proposed Valley–Ivyglen Project, and no additional poles would be placed. Cumulative impacts would be less than significant.

No emergency or evacuation routes are identified in the Riverside County General Plan, Riverside County EOP, or Local Hazard Mitigation Plan, the City of Lake Elsinore General Plan, or the City of Menifee Draft General Plan in the vicinity of any of component of the proposed Alberhill Project (County of Riverside 2006, 2008, 2012; City of Lake Elsinore 2011a; City of Menifee 2013a). The City of Orange's EOP does not define evacuation routes for emergencies (City of Orange 2010). There would be no cumulative impact due to interference with an adopted emergency response plan or emergency evacuation plan.

The proposed Alberhill Project's contribution to the significant cumulative fire risk impact would be mitigated through adhering to rules, regulations, and standards. Additionally, ~~MM HZ-5~~ MM HZ-4 would require preparation and implementation of a Fire Control and Emergency Response plan to reduce the risk of fire and impacts that would result should a fire occur. The proposed Alberhill Project's impacts related to wildfire exposure would not be cumulatively considerable.

6.3.9 Hydrology and Water Quality

6.3.9.1 Approach

This cumulative hydrology and water quality analysis uses both the project list approach and the plan approach, depending on the impact. Certain hydrology and water quality impacts are project-specific and highly localized. In such a case, it is most appropriate to use the project list approach so that hydrology and water quality impacts of actual nearby projects can be taken into account in determining whether there would be significant cumulative hydrology and water quality impacts. Some impacts, however, are basin- or countywide, making a projections approach most appropriate to characterize cumulative impacts for this resource area.

6.3.9.2 Geographic Scope

The geographic scope of cumulative impacts for hydrology and water quality would depend on the impact. Impacts related to groundwater supply, stormwater runoff, and dam failure are regional and thus examined at the county level. The remainder of the impacts is more localized, and the geographic scope is within 0.25 miles of the proposed projects. The temporal scope of cumulative impacts would include construction and operation of the proposed projects.

6.3.9.3 Summary of Projections Cumulative Scenario

There may be groundwater removal from the Elsinore Groundwater Basin due to dewatering for the proposed projects. The Elsinore Groundwater Basin is projected to continue to lose water due to overdraft and result in a net deficit through 2020 (EVMWD 2005).

The 2003 Riverside County General Plan EIR only evaluates with regards to dam inundation hazards related to placing habitable structures in dam inundation areas (County of Riverside 2003b). The Riverside County General Plan update EIR, however, characterizes the risks from dam failure in that future development would increase the number of structures in dam inundation zones, but this development would be subject to current County regulations that would reduce those impacts (County of Riverside 2015). Buildout of the Menifee General Plan would increase the number of people and structures exposed to dam inundation threat (City of Menifee 2013a). The Perris General Plan would also increase the number of people and structures at risk of inundation in the event of dam failure, but such impacts would be reduced with measures in the General Plan that outline evacuation of the city (City of Perris 2005a). The Lake Elsinore General Plan would also increase the number of people and structures at risk of inundation in the case of dam failure, but such impacts are limited due to the feasibility of evacuation of the City (City of Lake Elsinore 2011b).

6.3.9.4 Valley–Ivyglen Project

Project List Cumulative Scenario

~~Note that where the proposed Alberhill Project would overlap with the proposed Valley–Ivyglen Project along 115-kV Segment ASP2, there would be no impact on water quality or hydrology as conductor would be strung on existing structures~~There would be no impact on water quality or hydrology where the ASP would overlap VIG (Segment ASP2) because the conductor would be installed overhead on existing structures. The proposed Alberhill Project is therefore not included in this discussion. Table 6-10 lists cumulative projects that form the cumulative scenario for hydrology and water quality impacts associated with the proposed Valley–Ivyglen Project.

Table 6-10 VIG Cumulative Projects within the Hydrology and Water Quality Geographic Scope

Valley–Ivyglen Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment VIG1	Valley South Subtransmission Project, Talavera, Mott Town Center
115-kV Segment VIG2	Colinas de Oro
115-kV Segment VIG3	Walmart Lake Elsinore
115-kV Segment VIG4	Alberhill Project (115-kV Segment ASP2)
115-kV Segment VIG5	Alberhill Project (115-kV Segment ASP2) , Alberhill Village, Alberhill Ranch, Alberhill Ridge
115-kV Segment VIG8	Terramor

Cumulative Impacts

The proposed Valley–Ivyglen Project and the cumulative projects would be required to adhere to applicable water quality regulations at the local, state, and federal level. Likewise, all projects would be required to comply with applicable permitting requirements and to obtain permits under Section 401 of the Clean Water Act (Water Quality Certification) and Section 1600 of the California Fish and Game Code (Waste Discharge Requirements). The cumulative projects would not have a significant impact on water quality, and the proposed Valley–Ivyglen Project would not considerably contribute to a cumulative significant impact.

Given the cumulative significant impact on groundwater supplies (described in the summary of projections cumulative scenario), dewatering during excavation activities would contribute to a significant cumulative impact. The proposed Valley–Ivyglen Project would result in a non-substantial amount of dewatering relative to the amount of groundwater in the entire basin, and dewatering would occur only during construction. The proposed Valley–Ivyglen Project's contribution to a significant cumulative impact related to groundwater availability in the Elsinore Groundwater Basin would be less than significant.

All of the cumulative projects would require ground disturbance, with many of them requiring a substantial amount of ground disturbance or grading given their size, which could lead to increased erosion rates. The cumulative projects would each disturb more than 1 acre of land and therefore would have to comply with the NPDES program. The NPDES would require the preparation and implementation of SWPPPs for construction activities to ensure the reduction of pollutants during stormwater discharges. Given that the cumulative projects and the proposed Valley–Ivyglen Project would implement standard stormwater pollution prevention mitigation measures to ensure that earthwork activities do not result in substantial erosion and siltation, the proposed Valley–Ivyglen Project would make no cumulatively considerable contribution to any significant cumulative impact.

Construction of the proposed Valley–Ivyglen Project and all the cumulative projects would likely involve alteration of drainage through grading and excavation, which in some cases could result in potential flooding. The Motte Town Center, Terramor, Valley South Subtransmission Project, and Walmart Lake Elsinore are located in flat areas and would not involve modifications that would increase surface runoff to result in flooding. Alberhill Ridge, the Terramor, and Alberhill Village would involve a substantial amount of grading that could change drainage patterns and redirect runoff. This could result in a significant cumulative impact if the altered drainage patterns and runoff were to result in flooding. The proposed Valley–Ivyglen Project would involve grading near Alberhill Ridge, Terramor, and Alberhill Village; however, the graded areas would be restored and would be negligible compared to the grading for Alberhill Ridge and Alberhill Village. The proposed project's contribution to any significant cumulative impact would not be cumulatively considerable.

The amount of grading occurring where the proposed Valley–Ivyglen Project and Valley South Subtransmission Project would occur would be minimal and limited to the area around poles worked on for both projects. Any cumulative impact would be less than significant.

The proposed Valley–Ivyglen Project and all of the cumulative projects would create impervious surfaces. Given the sheer size of some of the projects in the project list cumulative scenario, such as Terramor and Alberhill Village, a substantial amount of stormwater could be generated, leading to a potentially significant cumulative impact to which the proposed Valley–Ivyglen Project would contribute. The proposed Valley-Ivyglen Project would introduce a total of only 0.4 acres of new impervious surface distributed somewhat evenly over 27 miles, and only a minimal amount of this mileage would be located adjacent to the cumulative projects. Further, any construction within Riverside County Flood Control and Water Conservation District facilities would require encroachment permits to ensure reduction of impacts to any flood control facilities. The proposed project's contribution to a significant cumulative impact would not be cumulatively considerable.

The only cumulative project located in a 100-year flood zone is the Motte Town Center. The Motte Town Center would place a substantial number of structures (484,000 square feet of retail) in a 100-year flood zone. Thus, there could be a cumulative significant impact related to redirecting flood flow. In these areas, there would be minimal structures installed associated with the proposed Valley–Ivyglen Project. Further, any flood flows would flow around poles. The proposed Valley–Ivyglen Project's contribution to a significant cumulative impact would be less than significant.

The cumulative risks associated with dam failure as described in the summary of projections cumulative scenario are less than significant, given that the potential for evacuation would be low and that structures would be built according to various building requirements. Therefore, the proposed Valley–Ivyglen Project would not contribute to a cumulatively significant impact.

The proposed Valley–Ivyglen Project would be located in areas where mudflows may be a risk after precipitation. None of the cumulative projects, however, are located in any of the same mudflow risk areas. Thus, the proposed project would not contribute to a cumulatively significant impact related to mudflows.

6.3.9.5 Alberhill Project

Project List Cumulative Scenario

Table 6-11 lists cumulative projects that form the cumulative scenario for hydrology and water quality impacts associated with the proposed Alberhill Project.

Table 6-11 ASP Cumulative Projects within the Hydrology and Water Quality Geographic Scope

Alberhill Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment ASP2	Valley–Ivyglen Project (115-kV Segment VIG4 and VIG5), Alberhill Village, Alberhill Ranch, Alberhill Ridge
115-kV Segment ASP4	Summerly
115-kV Segment ASP5	Oak Creek Canyon
115-kV Segment ASP6	Hidden Hills

Cumulative Impacts

The proposed Alberhill Project and the cumulative projects would be required to adhere to applicable water quality regulations at the local, state, and federal level. Likewise, all projects would be required to comply with applicable permitting requirements and to obtain permits under Section 401 of the Clean Water Act (Water Quality Certification) and Section 1600 of the California Fish and Game Code (Waste Discharge Requirements). The cumulative projects would not have a significant impact on water quality, and the proposed Alberhill Project would not considerably contribute to create a cumulative significant impact.

Given the cumulative significant impact on groundwater supplies (described in the summary of projections cumulative scenario), dewatering during excavation activities would contribute to a significant cumulative impact. The proposed Alberhill Project would result in a non-substantial amount of dewatering relative to the amount of groundwater in the entire basin, and dewatering would occur only once and would not be an ongoing use. The proposed Alberhill Project's contribution to a significant cumulative impact related to groundwater availability in the Elsinore Groundwater Basin would be less than significant.

All of the cumulative projects would require ground disturbance, with many of them requiring a substantial amount of ground disturbance or grading ~~given their size~~, which could lead to increased erosion rates. The cumulative projects would each disturb more than 1 acre of land and therefore would have to comply with the NPDES program. The NPDES would require the preparation and implementation of SWPPPs for construction activities to ensure the reduction of pollutants during stormwater discharges. Given that the cumulative projects and the proposed Alberhill Project would implement standard stormwater pollution prevention mitigation measures to ensure that earthwork activities do not result in

substantial erosion and siltation, the proposed Alberhill Project would make no cumulatively considerable contribution to any significant cumulative impact.

Construction of the proposed Alberhill Project and all the cumulative projects would likely involve alteration of drainage through grading and excavation, which in some cases could result in potential flooding. The Summerly and Hidden Hills projects are located in flat areas and would not involve modifications that would increase surface runoff to result in flooding. The proposed Alberhill Project segment adjacent to or collocated with the proposed Valley–Ivyglen Project, Alberhill Ranch, Alberhill Ridge, and Alberhill Village projects would not involve ground disturbance and would therefore not combine with these cumulative projects to contribute to a cumulative flooding impact. Oak Creek Canyon overlaps with the proposed Alberhill Project for ~~a minimal~~an insignificant linear distance such that the grading in this area associated with both projects would be ~~negligible~~minimal. Any cumulative impact would be less than significant.

Construction of the proposed Alberhill Project and all the cumulative projects would involve creation of impervious surfaces. Cumulative impacts would therefore only occur where the proposed project is adjacent to Hidden Hills, Summerly, and Oak Creek Canyon. Given the sheer size of some of the projects, a substantial amount of stormwater could be generated, leading to a potentially significant cumulative impact to which the proposed Alberhill Project would contribute. The proposed Alberhill Project would involve creation of small isolated impervious surfaces only along the borders of these projects for very short distances, however, such that the proposed project's contribution to a significant cumulative impact would not be cumulatively considerable.

The only cumulative project located in a 100-year flood zone is Summerly. The proposed Alberhill Project would not be located in the 100-year flood zone near Summerly. Therefore, the proposed Alberhill Project would not contribute to a cumulative significant impact.

The cumulative risks associated with dam failure as described in the summary of projections cumulative scenario are less than significant, given the potential for evacuation and that structures would be built according to various building requirements. Therefore, the proposed Alberhill Project would not contribute to a cumulatively significant impact.

The proposed Alberhill Project would be located in areas where mudflows may be a risk after precipitation. None of the cumulative projects, however, are located in any of the same mudflow risk areas. Thus, the proposed project would not contribute to a cumulatively significant impact related to mudflows.

6.3.10 Noise and Vibration

6.3.10.1 Approach

The cumulative noise and vibration analysis uses the project list approach. Noise and vibration impacts are project-specific and highly localized. It is therefore most appropriate to use the project list approach so that noise and vibration impacts of actual nearby projects can be taken into account in determining whether there would be significant cumulative noise and vibration impacts.

6.3.10.2 Geographic Scope

The geographic scope for cumulative noise impacts is the area in which noise from the proposed project could combine with noise from cumulative projects to affect a sensitive receptor. For the loudest projects, and given attenuation of noise over distance, this is presumed to be about 0.5 miles; there must also be a

sensitive receptor located in an area in which the noise from simultaneous projects could combine. The geographic scope for cumulative vibration impacts is the area in which vibration from the proposed project could combine with vibration from cumulative projects to affect a sensitive receptor. Given rapid attenuation of vibration over distance, this is presumed to be about 50 feet.

6.3.10.3 Valley–Ivyglen Project

Project List Cumulative Scenario

Table 6-12 lists the cumulative projects that form the cumulative scenario for noise impacts associated with the proposed Valley–Ivyglen Project.

Table 6-12 VIG Cumulative Projects within the Noise Geographic Scope

Valley–Ivyglen Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment VIG1	Valley South Subtransmission Project, Talavera, Mott Town Center, Underwood
115-kV Segment VIG2	Colinas de Oro
115-kV Segment VIG3	Walmart Lake Elsinore
115-kV Segment VIG4	Alberhill Project(115-kV Segment ASP2)
115-kV Segment VIG5	Alberhill Project (115-kV Segment ASP2) , Alberhill Village, Alberhill Ranch, Alberhill Ridge
115-kV Segment VIG8	Terramor

Cumulative Impacts

Although the proposed Alberhill Project would overlap with the proposed Valley–Ivyglen Project, noise impacts would not combine during construction. Poles would first be installed for the proposed Valley–Ivyglen Project, followed by installation of conductor for the proposed Valley–Ivyglen Project, and then installation of conductor for the proposed Alberhill Project. Thus, construction noise would occur at separate times and would not combine to result in a cumulative impact.

Noise from construction of the proposed Valley–Ivyglen Project could combine with noise from construction of cumulative projects to result in a significant cumulative impact—either exposure to noise above local standards or a substantial temporary or periodic increase in ambient noise levels. The proposed Valley–Ivyglen Project would comply with all applicable local noise ordinance and therefore would not contribute to a cumulatively significant impact on noise standards.

Given that the noise ordinances generally place only time restrictions on construction activities, adherence to local ordinances may still allow for substantial increases in ambient noise, which could result in a significant noise impact to which the proposed project would contribute. Mitigation would require the proposed Valley–Ivyglen Project to adhere to a limit of 75 A-weighted decibels (dBA). If cumulative projects generate 75 dBA or more, noise levels would, once combined, be at most a few more decibels louder than the highest project noise level. For example, if the proposed project generates 75 dBA and another project generates 75 dBA, the combined noise level would be 78 dBA. A 3-dBA change in noise levels is barely perceptible. If the proposed project generates 75 dBA and another project generates 80 dBA, the combined noise level would be 81 dBA. Should another project be louder, its volume would have more influence than the proposed project on the final sound level. The proposed project's contribution to a significant cumulative noise impact due to non-blasting activities would therefore not be cumulatively considerable.

Blasting could occur along 115-kV Segments VIG1, VIG2, VIG5, and VIG8. There are no cumulative projects located within 0.5 miles of the blasting locations on 115-kV Segment VIG1 or VIG2. Terramor would be located within 0.5 miles of blasting locations on 115-kV Segment VIG8, but there are no nearby

sensitive receptors. The blasting location on 115-kV Segment VIG5 is located near Alberhill Ranch and Alberhill Ridge, and there are sensitive receptors already in the Alberhill Ranch development south of Nichols Road. Noise from construction of houses could combine with noise from blasting to result in a significant impact. Blasting is particularly loud and would contribute the most noise to the cumulative impact. ~~The proposed project would t~~Therefore, the proposed project would contribute to ~~make a cumulatively considerable contribution to~~ a potentially significant noise impact, which would be cumulatively considerable. MM NV-1 would be implemented to reduce noise impacts, but noise impacts are not mitigable to less than significant.

The cumulative projects would increase the permanent ambient noise levels as a result of increased human and vehicle presence. The proposed Alberhill Project would contribute corona noise in areas where the proposed Valley–Ivyglen and Alberhill Projects would overlap. The proposed Valley–Ivyglen Project would permanently contribute corona noise during the operation of the project. However, as discussed in Section 4.11, "Noise and Vibration," corona noise would not be perceptible against the current ambient noise levels and therefore would not considerably contribute to cumulative noise levels.

The proposed Valley–Ivyglen Project would not be located near enough to an airport to contribute to a cumulative significant impact related to proximity to a public or private airport.

There are no cumulative projects within the geographic scope for cumulative vibrations impacts. There would be no cumulative vibration impact.

6.3.10.4 Alberhill Project

Project List Cumulative Scenario

Table 6-13 lists the cumulative projects that form the cumulative scenario for noise impacts associated with the proposed Alberhill Project.

Table 6-13 ASP Cumulative Projects within the Noise Geographic Scope

Alberhill Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment ASP2	Valley–Ivyglen Project (115-kV Segment VIG4 and VIG5), Alberhill Village, Alberhill Ranch, Alberhill Ridge
115-kV Segment ASP4	Summerly
115-kV Segment ASP5	Oak Creek Canyon
115-kV Segment ASP6	Hidden Hills

Cumulative Impacts

Although the proposed Alberhill Project would overlap with the proposed Valley–Ivyglen Project, noise impacts would not combine during construction. Poles would first be installed for the proposed Valley–Ivyglen Project, followed by installation of conductor for the proposed Valley–Ivyglen Project, and then installation of conductor for the proposed Alberhill Project. Thus, construction noise would occur at separate times and would not combine to result in a cumulative impact.

Noise from construction of the proposed Alberhill Project could combine with noise from construction of cumulative projects to result in a significant cumulative impact—either exposure to noise above local standards or a substantial temporary or periodic increase in ambient noise levels. The proposed Alberhill Project would comply with all applicable local noise ordinance and therefore would not contribute to a cumulatively significant impact on noise standards.

Given that the noise ordinances generally place only time restrictions on construction activities, adherence to local ordinances may still allow for substantial increases in ambient noise, which could result in a significant noise impact to which the proposed project would contribute. Mitigation would require the proposed Alberhill Project to adhere to a 75-dBA limit. If cumulative projects generate 75 dBA or above, noise levels would, once combined, be at most a few more decibels louder than the highest project noise level. For example, if the proposed project generates 75 dBA and another project generates 75 dBA, the combined noise level would be 78 dBA. A 3-dBA change in noise levels is barely perceptible. If the proposed project generates 75 dBA and another project generates 80 dBA, the combined noise level would be 81 dBA. Should another project be louder, its volume would have more influence than the proposed Alberhill Project on the final sound level. The proposed project's contribution to a significant cumulative noise impact would therefore not be cumulatively considerable.

The cumulative projects would increase the permanent ambient noise levels as a result of increased human and vehicle presence. The proposed Valley–Ivyglen Project would contribute corona noise in areas where the proposed Alberhill and Valley–Ivyglen projects would overlap. Cumulative project are not located in the geographic scope of the 500-kV and substation components of the proposed Alberhill Project. The 115-kV subtransmission lines of the proposed Alberhill Project would permanently contribute corona noise during the operation of the project. However, as discussed in Section 4.11, "Noise and Vibration," corona noise would not be perceptible against the current ambient noise levels, and therefore would not considerably contribute to cumulative noise levels.

Only 115-kV Segment ASP8 is located within 2 miles of a public use airport. There are no cumulative projects within 0.5 miles of 115-kV Segment ASP8; therefore, there would be no cumulative noise impacts related to proximity to a public or private airport.

There are no cumulative projects within the geographic scope for cumulative vibrations impacts. There would be no cumulative vibration impact.

6.3.11 Population and Housing

6.3.11.1 Approach

The projections approach is most appropriate for analyzing the proposed project's cumulative impact to population and housing. Each jurisdiction that overlaps the proposed project area has experienced and is forecasted to continue experiencing significant population growth. Each area's general plan is designed to account for future population growth and associated needs on regional scales. Routine projections of population are made to assist with planning housing and other services over long time frames. Because population growth occurs at a city, county, and regional level, a project approach would not adequately represent the cumulative scenario. Therefore, a summary of projections is most appropriate to characterize potentially cumulative impacts in this resource area.

6.3.11.2 Geographic Scope

The geographic scope of cumulative impacts would include land uses within the jurisdictions of unincorporated Riverside County and the cities of Lake Elsinore, Wildomar, Perris, Menifee, and Orange.

6.3.11.3 Valley–Ivyglen Project

Cumulative Scenario

Projections of population growth and housing requirements for the cities of Lake Elsinore, Wildomar, Menifee, Perris, and Riverside County are completed at regular intervals and inform updates to each jurisdiction's General Plan and Housing Element. The projections used to identify the cumulative scenario for the proposed Alberhill Project include:

- Population data from the Year 2010 U.S Census
- California Department of Finance 2015 Population and Housing Estimates
- Southern California Association of Governments' Draft 2016 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) Growth Forecast by Jurisdiction

Cumulative Impacts

Under the projected scenarios, populations in the project area are predicted to grow by as much as 10 percent by the year 2020 (Table 4.12-1). This is a significant impact. As analyzed in Section 4.12, "Population and Housing," the proposed Valley-Ivyglen Project would not directly induce population growth in any of the proposed project area. The applicant anticipates that most, if not all, workers would come from nearby existing service centers and that should outside contractors be used, they would not be required to relocate. Even if all workers came from elsewhere, they would represent a negligible amount of population growth. The proposed Valley–Ivyglen Project's negligible contribution to a significant cumulative impact would not be cumulatively considerable.

6.3.11.4 Alberhill Project

Cumulative Scenario

Projections of population growth and housing requirements for the cities of Lake Elsinore, Wildomar, Menifee, and Riverside County are completed at regular intervals and inform updates to each jurisdiction's General Plan and Housing Element. The projections used to identify the cumulative scenario for the proposed Alberhill Project include:

- Population data from the Year 2010 U.S Census
- Southern California Association of Governments' Adopted 2012 RTP Growth Forecast
- Southern California Association of Governments' Draft 2016 RTP/SCS Growth Forecast by Jurisdiction

Cumulative Impacts

Under the projected scenarios, populations in the project area are predicted to grow by as much as 10 percent by the year 2020 (Table 4.12-1). This is a significant impact. As analyzed in Section 4.12, "Population and Housing," the proposed Alberhill Project would not directly induce population growth in any of the proposed project area. The applicant anticipates that most, if not all, workers would come from nearby existing service centers and that should outside contractors be used, they would not be required to relocate. Even if all workers came from elsewhere, they would represent a negligible amount of population growth. The proposed project's negligible contribution to a significant cumulative impact would not be cumulatively considerable.

6.3.12 Public Services

6.3.12.1 Approach

The projections approach is considered more appropriate for analyzing the proposed projects' cumulative impact to public services. Public services are provided at the city and county levels and effects thereon are measured and planned for by service providers at city and county levels. The proposed projects cover an expansive geographic range across multiple jurisdictions. Accordingly, a summary of projections is most appropriate to characterize potentially cumulative impacts in this resource area.

6.3.12.2 Geographic Scope

The geographic scope of cumulative impacts would include the jurisdictions where the public utilities serving the proposed project overlap with those serving the cumulative projects. Public services within the jurisdictions of unincorporated Riverside County and the cities of Lake Elsinore, Wildomar, Menifee, and Perris cover the geographic scope for this criterion.

6.3.12.3 Valley–Ivyglen Project

Cumulative Scenario

As stated in Section 4.13 "Public Services and Utilities," demand for public services and utilities is largely affected by an area's population. There is a direct correlation between population size and demand for public services such as fire and police protection, schools, parks, hospitals, and libraries. Construction of the proposed Valley–Ivyglen Project could have effects on public services in Riverside County and the cities of Lake Elsinore, Perris, and Menifee. The cumulative scenario within which the proposed Valley–Ivyglen Project's contribution to impacts is evaluated is informed by:

- The City of Lake Elsinore (2011b) General Plan Update EIR
- The City of Perris (2005b) General Plan EIR
- The City of Menifee (2013b) General Plan Draft EIR
- Riverside County (2003b) General Plan Final Program EIR
- Riverside County (2015) General Plan Draft EIR No. 521
- Southern California Association of Governments (2012) Adopted 2012 TTP Growth Forecast
- Southern California Association of Governments (2015) Draft 2016 RTP/SCS Growth Forecast by Jurisdiction
- Population Data from the Year 2010 U.S. Census

Cumulative Impacts

Population growth in the City of Perris is projected to increase to approximately 114,000 people by the year 2035 (SCAG 2012). This will represent an approximate increase of about 66 percent from current. Riverside County predicts that at full buildout of the General Plan, 1,327 new Sworn Peace Officers and 263 additional fire stations would be needed to serve the population. Additionally, schools would need to accommodate 406,300 students and provide 799,500 square feet of library space and nearly 4 million volumes (County of Riverside 2015). The City of Menifee estimates that at full General Plan buildout, 31 additional Sworn Peace Officers, six fire stations, 11 elementary and two middle schools, and 48,000 square feet of library space and 162,486 volumes would be necessary to serve the population (City of

Menifee 2013b). The City of Lake Elsinore predicts that at full General Plan buildout, 227 Sworn Peace Officers, space for 51,928 new students, and 159,428 square feet of library space and 797,150 volumes would need to be added to accommodate population growth (City of Lake Elsinore 2011b). Forecasted growth and the associated need to increase public services would be a significant cumulative impact.

The proposed Valley-Ivyglen Project is expected to be constructed over 28~~27~~ months and would use up to 125 personnel. No long-term staffing needs are anticipated for operations and maintenance. If outside contractors made up the entirety of the construction crews, then temporary impacts from the 125 workers may occur. The temporary addition of 125 people to the proposed project area is small relative to the projected population growth from general plan buildout, and therefore the impact to public services from the proposed Valley-Ivyglen Project would not be cumulatively considerable.

6.3.12.4 Alberhill Project

Cumulative Scenario

As stated in Section 4.13 "Public Services and Utilities," demand for public services and utilities is largely affected by an area's population. There is a direct correlation between population size and demand for public services such as fire and police protection, schools, parks, hospitals, and libraries. Construction of the proposed Aberhill System Project could have effects on public services in Riverside County and the cities of Lake Elsinore, Wildomar, and Menifee. The cumulative scenario within which the proposed Alberhill Project's contribution to impacts is evaluated is informed by:

- The City of Lake Elsinore (2011b) General Plan Update Final Program EIR
- The City of Menifee (2013b) General Plan Draft EIR
- Riverside County (2003a) General Plan Final Program EIR
- Riverside County (2015) General Plan Draft EIR No. 521
- Southern California Association of Governments (2012) Adopted 2012 TTP Growth Forecast
- Southern California Association of Governments (2015) Draft 2016 RTP/SCS Growth Forecast by Jurisdiction
- Population Data from the Year 2010 U.S. Census

Cumulative Impacts

Under the cumulative scenario, population size within and near the proposed project area is predicted to increase significantly in the coming decades. Riverside County predicts that at full buildout of the General Plan, 1,327 new Sworn Peace Officers and 263 additional fire stations would be needed to serve the population. Additionally, schools would need to accommodate 406,300 students and provide 799,500 square feet of library space and nearly 4 million volumes (County of Riverside 2015). The City of Menifee estimates that at full General Plan buildout, 31 additional Sworn Peace Officers, six fire stations, 11 elementary and two middle schools, and 48,000 square feet of library space and 162,486 additional volumes (in the public library) would be necessary to serve the population (City of Menifee 2013b). The City of Lake Elsinore predicts that at full General Plan buildout 227 Sworn Peace Officers, space for 51,928 new students, 159,428 square feet of library space and 797,140 additional volumes (in the public library) would need to be added to accommodate population growth (City of Lake Elsinore 2011b). Forecasted growth and the associated need to increase public services would be a significant cumulative impact.

The proposed Alberhill Project is expected to be constructed with local construction crew. ~~s and to~~The substation would be unstaffed during ~~the~~ operations ~~phase~~. If outside contractors are used for construction, impacts on public services ~~from them~~ would be temporary—lasting no more than the 28 month. Outside contractors would consist of no more than 100 workers.~~s and requiring no more than 100 personnel.~~ The temporary addition of 100 people to the proposed project area is small relative to the projected population growth from general plan buildout, and therefore, the impact to public services from the proposed Alberhill Project is not cumulatively considerable.

6.3.13 Recreation

6.3.13.1 Approach

The projections approach is considered more appropriate for analyzing the proposed project's cumulative impact to recreation. Recreational facilities are provided at the city and county levels and effects to them are measured and planned for on those levels. Additionally, the proposed project's expansive geographic range covers multiple jurisdictions and a long time frame, making a summary of projections more appropriate to characterize potentially cumulative impacts.

6.3.13.2 Geographic Scope

The geographic scope of cumulative impacts would include recreational facilities within Riverside County and the cities of Lake Elsinore, Wildomar, Perris, Menifee, and Orange.

6.3.13.3 Valley–Ivyglen Project

Cumulative Scenario

The cumulative scenario within which the proposed Valley–Ivyglen Project's effects on recreation are analyzed is informed by planning documents and population forecasts for the jurisdictions that overlap with the project area, including:

- The City of Lake Elsinore (2008) Parks and Recreation Master Plan (2008)
- The City of Menifee (2013b) General Plan Draft EIR
- The City of Perris (2005c) Parks and Recreation Master Plan
- Riverside County (2003b) General Plan Final Program EIR
- Riverside County (2015) General Plan Draft Environmental Impact Report No. 521
- Southern California Association of Governments (2012) Adopted 2012 TTP Growth Forecast
- Southern California Association of Governments (2015) Draft 2016 RTP/SCS Growth Forecast by Jurisdiction

Cumulative Impacts

Under the cumulative scenario, jurisdictions that overlap the proposed project area are anticipated to experience significant population increases between 2015 and 2020. The City of Lake Elsinore is predicted to experience the smallest change, at 5 percent population increase, while the remaining jurisdictions are predicted to experience between 6 and 10 percent increases (see Section 4.11, "Population and Housing"). Additional parks and open space would be developed to accommodate this growth; therefore, this population increase would have a significant impact on recreation in the proposed project area. However, construction personnel for the proposed Valley–Ivyglen Project would likely be

local and would not add to existing use of recreational facilities. In the event that personnel are not local, the number and variety of recreational facilities nearby would be adequate to accommodate increased use. Therefore, the proposed Valley–Ivyglen Project's contribution to recreation impacts would not be cumulatively considerable.

6.3.13.4 Alberhill Project

Cumulative Scenario

Similar to Section 6.3.12, "Public Services," above, the cumulative scenario within which the proposed Alberhill Project's effects on recreational facilities is analyzed is informed by various jurisdictions' planning documents and population forecasts:

- The City of Lake Elsinore (2008) Parks and Recreation Master Plan The City of Menifee's General Plan Draft EIR
- Riverside County (2003a) General Plan Final Program EIR
- Riverside County (2015) General Plan Draft EIR No. 521
- Southern California Association of Governments (2012) Adopted 2012 TTP Growth Forecast
- Southern California Association of Governments (2015) Draft 2016 RTP/SCS Growth Forecast by Jurisdiction

Cumulative Impacts

Under the cumulative scenario, jurisdictions that overlap the proposed project area are anticipated to experience significant population increases between 2014 and 2020. The City of Lake Elsinore is predicted to experience the smallest change, at 5 percent population increase, while the remaining jurisdictions are predicted to experience between 6 and 10 percent increases (see Section 4.11 "Population and Housing"). Additional parks and open space would be developed to accommodate this growth; therefore, this population increase would have a significant impact on recreation in the proposed project area. However, construction personnel for the proposed project would likely be local and would not add to existing use of recreational facilities. In the event that personnel are not local, the number and variety of recreational facilities nearby would be adequate to accommodate increased use. Therefore, the proposed Alberhill Project's contribution to recreation impacts would not be cumulatively considerable.

6.3.14 Transportation and Traffic

6.3.14.1 Approach

The project list approach was used to assess the proposed projects' cumulative impact to traffic and transportation. Traffic and transportation impacts occur locally. The proposed projects' traffic impacts would be the most intense in the area closest to where the projects would be built. A countywide or regional approach would not provide sufficient detail to analyze cumulative traffic impacts. Therefore, a project list approach is most appropriate for this resource area.

6.3.14.2 Geographic Scope

The geographic scope for cumulative traffic impacts includes the intersections that would be indicative of the proposed projects' impacts, as analyzed in Section 4.15, "Traffic and Transportation." In general, these are the intersections closest to construction areas, as well as the intersections at freeway on-ramps and off-ramps.

6.3.14.3 Valley–Ivyglen Project

Cumulative Scenario

Table 6-14 lists the cumulative projects that form the cumulative scenario for transportation and traffic impacts associated with the proposed Valley–Ivyglen Project:

Table 6-14 VIG Cumulative Projects within the Transportation and Traffic Geographic Scope

Valley–Ivyglen Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment VIG2	Colinas de Oro
115-kV Segment VIG3	Walmart Lake Elsinore
115-kV Segment VIG4	Alberhill Project(115-kV Segment ASP2)
115-kV Segment VIG5	Alberhill Project (115-kV Segment ASP2), Alberhill Ranch

Terramor, Terracina, Alberhill Ridge, and Alberhill Villages would generate short-term traffic during construction and long-term traffic once houses are built. Motte Town Center and Marketplace at Harvest Glen would also generate traffic both during and after construction. The construction dates of these projects are unknown, however, so it would be speculative to determine that traffic impacts could occur at the same time as the proposed project's traffic impacts. It would also be speculative to determine whether other construction-related impacts would occur at the same time as those of the proposed Valley–Ivyglen Project. These projects are therefore omitted from the cumulative scenario for traffic generation. The Talavera project would not impact the same intersections studied for the proposed project; it has therefore been omitted from the cumulative scenario.

Cumulative Impacts

Table 6-15 shows cumulative traffic impacts of the proposed Valley–Ivyglen Project. The proposed Valley–Ivyglen Project would have cumulatively considerable impacts on LOS standards (Table 6-15). None of the cumulative projects would result in installation of tall structures that would interfere with air traffic. There would be no cumulative impact on air traffic.

Table 6-15 Cumulative Traffic Impacts of the Proposed Valley–Ivyglen Project(1)

Intersection	Cumulative Projects and Impacts	Cumulative Scenario Significant?	Proposed Valley–Ivyglen Project Impacts	Cumulatively Considerable?
Menifee Road/ Pincate Road (SR-74)	Alberhill Project – 1.9 (PM)	Yes, reduce PM LOS from D to E	5.2 (PM)	Yes, total delay 7.1 (PM). Alberhill Project would contribute approximately 73 percent of the overall delay
Lake Street/ I-15 Northbound Ramps	Alberhill Project – 54.7 (PM)	Yes, intersection is currently operating at LOS F	40.5 (PM)	Yes, total delay 95.2 (PM). Alberhill Project would contribute approximately 43 percent of the overall delay
Central Avenue (SR-74)/ Rosetta Canyon Drive	Walmart Lake Elsinore – 1.0 (AM); 0.3 (PM) Colinas del Oro – no delay information available	No(2)	0.2 (AM) 0.1 (PM)	No, Total delay – at least 1.2 (AM); 0.4 (PM) would not degrade LOS

Table 6-15 Cumulative Traffic Impacts of the Proposed Valley–Ivyglen Project(1)

Intersection	Cumulative Projects and Impacts	Cumulative Scenario Significant?	Proposed Valley–Ivyglen Project Impacts	Cumulatively Considerable?
Central Avenue (SR-74)/I-15 Northbound Ramps	Walmart Lake Elsinore – 1.5 (AM); 2.4 (PM) Colinas del Oro – no delay information available	No(2)	0.6 (AM) 4.3 (PM)	No, total delay – at least 2.1 (AM); 6.7 (PM) would not degrade LOS
Central Avenue (SR-74)/I-15 Southbound Ramps	Walmart Lake Elsinore – 2.1 (AM); 6.4 (PM) Colinas del Oro – no delay information available	Yes, PM LOS would reduce PM LOS from D to E3	0.3 (AM) 2.3 (PM)	Yes, total delay – at least 2.4 (AM); 8.7 (PM). AM LOS would not degrade, but PM LOS would reduce from D to E. Valley–Ivyglen Project would contribute approximately 25 percent to the overall delay.

Sources: LLG 2016a; City of Lake Elsinore 2015c; County of Riverside 2014a
Notes:
(1) Impacts are measured in seconds delay
(2) Colinas de Oro is not expected to result in degradation of LOS and in some cases would improve LOS due to project improvements (County of Riverside 2014a).
(3) Colinas del Oro Project would exacerbate the significant cumulative impact.
Key:
AM Peak hour in AM
I-15 Interstate 15
LOS Level of service
PM Peak hour in PM
SR-74 State Route 74

6.3.14.4 Alberhill Project

Cumulative Scenario

Table 6-16 lists the cumulative projects that form the cumulative scenario for the traffic and transportation impacts associated with the proposed Alberhill Project.

Table 6-16 ASP Cumulative Projects within the Traffic and Transportation Geographic Scope

Alberhill Project Component	Cumulative Projects within the Geographic Scope
115-kV Segment ASP2	Valley–Ivyglen Project (115-kV Segment VIG4 and VIG5), Alberhill Ranch,
115-kV Segment ASP3	Walmart Lake Elsinore
115-kV Segment ASP4	Summerly

The Terracina, Alberhill Ridge, Hidden Hills, Oak Creek Canyon, and Alberhill Villages projects would generate short-term traffic during construction and long-term traffic once houses are built. The construction dates of these projects are unknown, however, so it would be speculative to determine that traffic impacts could occur at the same time as the proposed project's traffic impacts. It would also be speculative to determine whether other construction-related impacts would occur at the same time as those of the proposed Alberhill Project. These projects are therefore omitted from the cumulative scenario for traffic generation.

Cumulative Impacts

Table 6-17 shows cumulative traffic impacts of the proposed Alberhill Project. The proposed Alberhill Project would have cumulatively considerable impacts on LOS standards (Table 6-17). None of the

cumulative projects would result in installation of tall structures that would interfere with air traffic. There would be no cumulative impact on air traffic.

Table 6-17 Cumulative Traffic Impacts of the Alberhill Project[1]

Intersection	Cumulative Projects and Impacts	Cumulative Scenario Significant?	Proposed Alberhill Project Impacts	Cumulatively Considerable?
Menifee Road/ Pincate Road (SR-74)	Valley–Ivyglen – 5.2 (PM)	Yes, reduce PM LOS from D to E	1.9 (PM)	Yes, total delay 7.1 (PM). The Alberhill Project would contribute approximately 27 percent of the overall delay.
Lake Street/ I-15 Northbound Ramps	Valley–Ivyglen Project – 40.5 (PM)	Yes, intersection is currently operating at LOS F	54.7 (PM)	Yes, total delay 95.2 (PM). The Alberhill Project would contribute approximately 57 percent of the overall delay
East Lakeshore Drive/Diamond Drive[2]	Walmart Lake Elsinore – 2.3 (PM)	No	0.4 seconds (PM peak hour)	No, total delay – 2.7 (PM) would not degrade LOS
I-15 Northbound Ramps/Railroad Canyon Road[2]	Walmart Lake Elsinore – 0.7 (PM)	No	0.1 (PM)	No, total delay – 0.8 (PM) would not degrade LOS

Sources: LLG 2016b, City of Lake Elsinore 2015
Notes
(1) Impacts are measured in seconds delay
(2) Summerly Project would also use these intersections; however, Summerly was under construction in 2014 and 2015 and therefore construction traffic for the Summerly Project is accounted for in the baseline traffic numbers.
Key:
AM Peak hour in AM
I-15 Interstate 15
LOS Level of service
PM Peak hour in PM
SR-74 State Route 74

6.3.15 Utilities and Service Systems

6.3.15.1 Approach

This analysis used the summary of projections approach to assess the proposed projects' cumulative impact to utilities and service systems. Utilities and service systems are provided at the county, city, or agency level and typically include extensive geographic areas. The proposed projects cross multiple service areas and jurisdictions and include long-term operation phases. Given the large project area and long-term duration of the projects, a project list would not capture an adequately descriptive cumulative scenario; therefore, a summary of projections approach is appropriate for this resource area.

6.3.15.2 Geographic Scope

The geographic scope of cumulative impacts on utilities and service systems includes water district boundaries and landfill service areas that overlap with the proposed project area. Water districts include the Elsinore Valley Municipal Water District (EVMWD), Eastern Municipal Water District (EMWD),

and Lee Lake Water District. Landfill service areas include those served by the El Sobrante and Badlands Landfills.

6.3.15.3 Cumulative Scenario

Substantial population growth that will increase demand of utility and service systems is anticipated within the proposed project area and within Riverside County as a whole. Riverside County predicts that at General Plan Buildout, in the year 2040, it will need to dispose of 4,148,156 tons, of solid waste in landfills each year (County of Riverside 2003a). The City of Lake Elsinore anticipates that at General Plan Buildout, in the year 2030, it would need to dispose of 87,747 tons of solid waste per year. The City of Perris anticipates that at general plan buildout, a total of 433,640 tons of solid waste would be disposed of per year (City of Perris 2005b). The El Sobrante Landfill and the Badlands Landfill are expected to remain open until 2045 and 2024, respectively.

Riverside County anticipates annual water demand of its unincorporated areas at general plan buildout to be 1,913,106 acre-feet per year. The City of Lake Elsinore predicts that in a Multiple Dry-Year scenario, the demand will consist of 68,169 acre-feet per year and the EVMWD's supply totals will be 78,181 acre-feet per year (City of Lake Elsinore 2011b). Based on these predictions, the City of Lake Elsinore will have an oversupply of 10,012 acre-feet. The City of Perris anticipates that at General Plan Buildout, its water demand would be 99,689 acre-feet per year (City of Perris 2005b). The cities of Perris and Murrieta are served by the EMWD, which identifies that it will, with the assistance of the Municipal Water District, have the ability to meet increased demand as a result of population growth forecasted for each year to 2035 (EMWD 2011). Forecasted growth and the associated increased demand on water under the cumulative scenario would result in a significant impact.

6.3.15.4 Valley–Ivyglen Project

The proposed Valley–Ivyglen Project would not export wastewater to regional or municipal sanitary wastewater facilities and will have no impact to wastewater; therefore, there would be no impacts to wastewater, and the proposed project would not contribute to cumulative impacts. Cumulative impacts to wastewater are not discussed further herein.

Construction of the proposed project would generate approximately 31,873 tons of waste over 28~~27~~ months, or an average of 14,165 tons per year, that would be disposed of in either the El Sobrante or Badlands landfill. The El Sobrante landfill has an annual tonnage limit of 5,859,710, and the Badlands landfill has an annual limit of 1,460,000. Each landfill is anticipated to be open until 2045 and 2024, respectively. Therefore, the cumulative impact would be less than significant.

The EVMWD~~23~~ anticipates a surplus of approximately 3,262,424,500 gallons of water during a Multiple Dry-Year scenario at general plan buildout. The EMWD anticipates having the ability to meet increased demand as forecasted out to 2035, indicating that cumulative water demand impacts would be less than significant.

6.3.15.5 Alberhill Project Impacts

The proposed Alberhill Project would not export wastewater to regional or municipal sanitary wastewater facilities and will have no impact to wastewater. The proposed project would have no impact to wastewater and therefore would not contribute to cumulative impacts. Cumulative impacts to wastewater are not discussed further herein.

Construction of the proposed project would generate 142,246 tons of waste material over 28 months, or an average of approximately 61,000 tons per year. Operations would not generate measurable tonnage of waste. The El Sobrante landfill has an annual tonnage limit of 5,859,710, and the Badlands landfill has an annual limit of 1,460,000. Each landfill is anticipated to be open until 2045 and 2024, respectively. Therefore, the cumulative impact would be less than significant.

The EVMWD anticipates a surplus of approximately 3,262,424,500 gallons of water during a Multiple Dry-Year scenario at general plan buildout. The EMWD anticipates having the ability to meet increased demand as forecasted out to 2035, indicating that cumulative water demand impacts would be less than significant.

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