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**CUMULATIVE IMPACTS AND
OTHER CEQA SECTIONS**

17.1 INTRODUCTION

The Cumulative Impacts and Other CEQA Sections chapter of the EIR includes discussions regarding those topics that are required to be included in an EIR, pursuant to the CEQA Guidelines Section 15126.2. The chapter includes an evaluation of the Whitehawk I (WHI) and Whitehawk II (WHII) projects' contributions toward cumulative impacts for each environmental topic evaluated in Chapters 4 through 15 of this EIR, as well as discussions of the projects' significant irreversible environmental changes, significant environmental effects which cannot be avoided, and growth-inducing impacts.

17.2 CUMULATIVE IMPACTS

CEQA Guidelines Section 15130 requires that an EIR discuss the cumulative and long-term effects of the proposed project that adversely affect the environment. "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355; see also Pub. Resources Code, Section 21083, subd. [b]). Stated another way, "[...] a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." (CEQA Guidelines Section 15130, subd. [a][1])

"[I]ndividual effects may be changes resulting from a single project or a number of separate projects." (CEQA Guidelines Section 15355, subd. [a]) "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (CEQA Guidelines Section 15355, subd. [b])

The need for cumulative impact assessment reflects the fact that, although a project may cause an "individually limited" or "individually minor" incremental impact that, by itself, is not significant, the incremental effect may be "cumulatively considerable" and, thus, significant when viewed together with environmental changes anticipated from past, present, and probable future projects (CEQA Guidelines Section 15064, subd. [h(1)], Section 15065, subd. [c], and Section 15355, subd. [b]). This formulation indicates that particular impacts may be less-than-significant on a project-specific basis, but significant on a cumulative basis, because their small incremental contribution, viewed against the larger backdrop, is cumulatively considerable.

The lead agency should define the relevant geographic area of inquiry for each impact category (id., Section 15130, subd. [b][3]), and should then identify the universe of "past, present, and probable future projects producing related or cumulative impacts" relevant to the various

categories, either through the preparation of a “list” of such projects or through the use of “a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact” (id., subd. [b][1]).

The possibility exists that the “cumulative impact” of multiple projects will be significant, but that the incremental contribution to that impact from a particular project may not itself be “cumulatively considerable.” Thus, CEQA Guidelines Section 15064, Subdivision (h)(5) states, “[...] the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable.” Therefore, it is not necessarily true that, even where cumulative impacts are significant, any level of incremental contribution must be deemed cumulatively considerable.

In accordance with CEQA Guidelines section 15130(b), “the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone.”

Cumulative Setting

In accordance with Section 15130(b)(1)(B) of the CEQA Guidelines, the majority of the cumulative analysis in this section is based upon a summary of projections contained in the Granite Bay Community Plan (GBCP); more specifically, buildout of the Granite Bay area in accordance with the land use designations shown on the adopted GBCP Land Use Map, as well as buildout of other reasonably foreseeable projects within the GBCP area, as determined by Placer County. The list of reasonably foreseeable projects, including recently-completed projects, is as follows:

- Amazing Facts Residential;
- Amazing Facts;
- Auburn Folsom/Fuller Drive;
- Barton Ranch;
- Chabad of Roseville;
- Colinas Estates;
- Country House Memory Care;
- Eden Roc II;
- Enclave at Granite Bay;
- Eureka at Granite Bay;
- Granite Bay Medical Complex;
- Granite Bay Memory Care;
- Granite Estates Prof. Center;
- Granite Rock Estates;
- Greyhawk II;
- Greyhawk III;
- Grove at Granite Bay;
- Hacienda Carmelitas Event Center;
- Hawk Homestead;
- Lake Vista Estates;
- Little Sunshine’s;
- Maher Subdivision;
- Olive Ranch Estates;
- Ovation Senior Living;
- Pardee Court;
- Park at Granite Bay;
- Placer Retirement Residence;
- Pond Pavilion and Lofts;
- Premier Granite Bay;
- Quarry Ridge Professional;
- Rancho Del Oro;
- Residences at GB Golf;
- Rolling Greens;
- Roseville Congregate Living Home;
- Sehr Winery & Event Center;
- St. Joseph Marelllo Church; and
- Ventura at Granite Bay.

It should be noted that the Hawk Homestead and Pardee Court developments are no longer moving forward at this time. However, both projects have been included and reflected in the cumulative traffic forecasts because they were reasonably foreseeable at the time the Transportation Impact Study was initiated. As a result, the cumulative traffic forecasts presented herein represent a worst-case estimate of cumulative volumes.

In the cumulative context, limited situations exist where the geographic setting differs. For example, the geographic setting for the hydrology analyses is the 101-square-mile Dry Creek Watershed, within which the project site is located. Other examples include air quality, for which the cumulative geographic setting is the Sacramento Valley Air Basin (SVAB). Global climate change is, by nature, a cumulative impact. Emissions of GHG contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts). A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the combination of GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate change applicable to the proposed projects, the geographical context for global climate change in this EIR is limited to the State of California.

For environmental resource areas that have a different cumulative setting from that discussed above, the specific cumulative setting for that resource area is presented along with the cumulative impact discussion in the relevant section below.

Cumulative Impacts and Mitigation Measures

The technical chapters of this EIR (Chapters 4 through 15) describe the Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures, while the Cumulative Impacts and Other CEQA Sections chapter of the EIR includes cumulative analyses as shown below. As stated above, GHG emissions and global climate change is, by nature, a cumulative impact. Thus, the proposed projects' impacts related to GHG emissions and global climate change are included in this chapter.

Aesthetics

Some types of impacts to aesthetic resources are localized and not cumulative in nature. For example, the creation of glare or shadows at one location is not worsened by glare or shadows created at another location. Rather these effects are independent, and the determination as to whether they are adverse is specific to the project and location where they are created. Projects that block a view or affect the visual quality of a site also have localized aesthetic impacts. The impact occurs specific to a site or area and remains independent from another project elsewhere that may block a view or degrade the visual environment of a specific site.

Two types of aesthetic impacts may be additive in nature and thus cumulative, including night sky lighting and overall changes in the visual environment as the result of increasing urbanization of large areas. As development in one area increases and possibly expands over time and meets or connects with development in an adjoining ex-urban area, the effect of night sky lighting experienced outside of the region may increase in the form of larger and/or more intense nighttime glow in the viewshed.

Similarly, as development in one area changes from rural to urban, and this pattern continues to occur throughout the undeveloped areas of a jurisdiction, the changes in visual character may become additive and cumulatively considerable. The proposed projects' incremental contribution to night sky lighting and changes in visual character are addressed below.

17-1 Long-term changes in visual character associated with cumulative development of the proposed projects in combination with future buildout of the GBCP. Based on the analysis below, the projects' incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

The geographic setting for analysis of long-term cumulative changes in visual character associated with the WHI and WHII projects is the area covered by the GBCP, as development within Granite Bay has the potential to affect many of the same views analyzed for the proposed projects. Views of the project sites include public views from Douglas Boulevard and private views from existing single-family residences in close proximity to the project sites. As noted in Chapter 4, Aesthetics, of this EIR, CEQA case law has specified that environmental analyses of proposed projects should focus on potential impacts of projects to public views, rather than potential impacts related solely to private views. Nevertheless, due to comments received during the scoping period for this EIR, private views of the project site were also considered in Chapter 4. Specific public views from Douglas Boulevard are identified in Figures 4-1 and 4-2 of this EIR.

Future development within Granite Bay would result in changes to the existing land use environment through conversion of vacant land to developed uses that could result in a change in visual character. However, such development would be subject to existing regulations and guidelines designed to ensure compatibility with adjacent land uses and ensure a pleasing visual character. The goals and objectives of the GBCP are to identify those features of the Plan area that characterize the unique nature and identifying traits of Granite Bay and then to specify standards of site development for proposed projects which would implement the goals and policies of the GBCP.

Specifically, such projects would be required to comply with the Placer County Landscape Guidelines, the Placer County Design Guidelines, the Placer County Rural Design Guidelines, the specific design guidelines contained in the GBCP, and all applicable sections of the Placer County Code. The Placer County Design Guidelines Manual provides instruction on the design direction to be implemented with the construction of new buildings, which includes setbacks, extensive use of wood, colors consistent with earth tones and significant amounts of landscaping. Such standards serve to reduce impacts on visual character and maintain consistency with the project surroundings.

WHI

The WHI project would use natural building materials (e.g., masonry, stucco, wood and stone) and colors (complementary natural, earth tones) consistent with the Placer County Design Guidelines Manual, the Granite Bay Municipal Advisory Council’s “Douglas Corridor – Design Elements and Landscape Goals”, as well as the proposed Whitehawk Architectural and Design Guidelines. While development of the cumulative projects in Granite Bay would result in conversion of vacant land to developed land, such development, including the WHI project, would develop new land uses that would be well designed and consistent with existing development in the larger project vicinity. Cumulative development, including the proposed project, would be required to comply with the setback design standards established with Section 4.2.11 of the GBCP, which requires building setbacks for residential development on the south side of Douglas Boulevard to be a minimum of 300 feet. The required 300-foot setback would help to preserve the visual character of public views from Douglas Boulevard.

Cumulative buildout in the geographic area would result in a substantial change in visual character of region and, thus, a significant cumulative impact could occur. However, with compliance with all applicable County requirements, the impact of the WHI project would be minimized to the maximum extent feasible such that the project’s incremental contribution to the significant impact would be less than cumulatively considerable.

WHII

Similar to the WHI project, the WHII project would be designed with natural building materials and colors consistent with the Placer County Design Guidelines Manual, the Granite Bay Municipal Advisory Council’s “Douglas Corridor – Design Elements and Landscape Goals”, as well as the proposed Whitehawk Architectural and Design Guidelines. Because WHII is proceeding with entitlements concurrent with this environmental document, and because the site plans for both projects have been conceived based upon a housing product designed for Meritage Homes, draft Whitehawk Architectural and Design Guidelines would be prepared prior to issuance of any building permits. It is anticipated that said Guidelines will define and establish the general character of both projects, and will ensure the buildout of both projects with similar and complementary design characteristics, including single-story homes. Similar to the WHI project discussed above, the WHII project would comply with Section 4.2.11 of the GBCP by incorporating a 300-foot setback from Douglas Boulevard. The incorporation of a 300-foot setback within the proposed project would help to preserve the visual character of the project site from public viewpoints along Douglas Boulevard. While the WHII project would include a larger overall development area compared to the WHI project, cumulative impacts related to long-term changes in visual character would be similar.

WHI and WHII

As discussed in further depth in Chapter 4, Aesthetics, of this EIR, CEQA case law has specified that environmental review is primarily concerned with public views. Both

projects would be substantially screened from public viewpoints along Douglas Boulevard through the incorporation of a 300-foot setback from the roadway. Considerable oak woodland occurs within the 300-foot setback, which would screen the project site from public viewpoints along Douglas Boulevard. Considering that both projects would be screened from public views by the aforementioned setbacks and oak woodlands, implementation of the combined projects would be anticipated to result in a less-than-cumulatively-considerable contribution to the significant impact.

Conclusion

Cumulative buildout in the geographic area would result in a substantial change in visual character of region and, thus, a significant cumulative impact would occur. However, with compliance with all applicable County requirements, the impact of the WHI and WHII projects would be minimized to the maximum extent feasible such that the projects' individual and combined incremental contributions to the significant impact would be *less than cumulatively considerable*.

Mitigation Measure(s)

None required.

- 17-2 Creation of new sources of light or glare associated with cumulative development of the proposed projects in combination with future buildout of the GBCP. Based on the analysis below, the projects' incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.**

WHI

Cumulative effects of lighting are visible over a wide area, due to the potential for lighting from a number of projects to create sky glow. Cumulative development throughout Granite Bay, particularly conversion of rural or currently vacant sites to urban uses, would increase the sources of light and glare, thereby contributing to sky glow in the area. Such sources of light would be typical of existing residential development in the project area, such as the residential subdivisions located to the north and west of the WHI site.

The WHI project, in combination with related development projects in Granite Bay, would result in a significant cumulative impact related to night lighting and sky glow in the region. However, the project would be subject to existing regulations and guidelines related to light and glare. For example, Section 17.54.070(i) of the Placer County Code requires that lighting is consistent with the lighting standards contained within the Placer County Design Guidelines Manual. In addition, the project would be subject to compliance with the applicable sections of the proposed Whitehawk Architectural and Design Guidelines related to lighting and light pollution. As described in Impact 4-2 of the Aesthetics chapter of this EIR, any street lighting required at the project entries would be reviewed and approved by the Development Review Committee (DRC), and lighting within the on-site internal roadways would be limited to low-intensity bollard lighting (Mitigation Measure

4-2). Mitigation Measure 4-2 requires the project's lighting to be Dark-Sky compliant as specified by the International Dark-Sky Association.

WHII

The WHII project would be subject to the same regulations and guidelines as WHI related to light and glare. While the WHII project would include a larger overall development area compared to the WHI project, cumulative impacts related to creation of new sources of light and glare would be similar.

WHI and WHII

With development of both the WHI and WHII projects, the potential exists for new sources of light on both sites to result in additive contributions to nighttime light pollution in the region. However, with implementation of Mitigation Measure 4-2, combined development of both projects would result in a less-than-cumulatively-considerable contribution to the significant impact.

Conclusion

Based upon the above analysis, while the proposed projects, in combination with future development, would result in a significant cumulative impact related to night lighting and sky glow in the region, the projects' individual and combined incremental contributions to the significant cumulative impact would be *less than cumulatively considerable*.

Mitigation Measure(s)

None required.

Air Quality

A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The geographic context for the cumulative air quality analysis includes Placer County and surrounding areas within the portion of the Sacramento Valley Air Basin (SVAB) that is designated nonattainment for ozone and respirable particulate matter (PM₁₀).

17-3 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

The proposed projects are within a nonattainment area for ozone and PM₁₀. By nature, air pollution is largely a cumulative impact. The population growth and vehicle usage within the nonattainment area from the proposed projects, in combination with other past, present,

and reasonably foreseeable projects within Placer County and surrounding areas, contributes to the region’s adverse air quality impacts on a cumulative basis, and could either delay attainment of AAQS or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the projects’ emissions of criteria air pollutants would contribute to cumulative regional air quality effects.

The Placer County Air Pollution Control District (PCAPCD) advises lead agencies to use the region’s existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS, and thus result in a significant incremental contribution to cumulative emissions. As discussed throughout Chapter 5, Air Quality, the PCAPCD’s recommended thresholds of significance for ozone precursors and PM₁₀ are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project’s ozone precursor and PM₁₀ emissions would be less than PCAPCD project-level thresholds, the project would not be expected to conflict with any relevant attainment plans, and would not result in a cumulatively considerable contribution to a significant cumulative impact. As a result, the operational phase cumulative-level emissions thresholds established by PCAPCD are identical to the project-level operational emissions thresholds; the operational/cumulative thresholds are presented in Table 17-1.

Table 17-1	
PCAPCD Thresholds of Significance	
Pollutant	Operational/Cumulative Threshold (lbs/day)
ROG	55
NO _x	55
PM ₁₀	82
<i>Source: Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. August 2017.</i>	

Accordingly, if the proposed projects would result in an increase of ROG, NO_x or PM₁₀ in excess of PCAPCD’s operational phase cumulative-level emissions threshold, which are identical to PCAPCD’s project-level operational emissions thresholds, the projects could potentially result in a significant incremental contribution towards cumulative air quality impacts. The cumulative contribution of WHI alone, WHII alone, and the combined contribution of WHI an WHII are discussed in further depth below.

WHI

The cumulative contribution to regional emissions resulting from operation of the WHI project alone is presented in Table 17-2. As shown in Table 17-2, operational emissions from WHI alone of ROG, NO_x, and PM₁₀ would be below the PCAPCD’s applicable thresholds of significance. As such, operation of WHI alone would not be considered to result in a significant incremental contribution to a cumulative violation of any air quality standards.

Table 17-2 Maximum Unmitigated Contribution of WHI Operational Emissions to Cumulative Conditions		
Pollutant	Project Emissions (lbs/day)	PCAPCD Cumulative Significance Threshold (lbs/day)
ROG	1.75	55
NO _x	3.80	55
PM ₁₀	1.77	82
<i>Source: CalEEMod, April 2018 (see Appendix C).</i>		

WHII

The cumulative contribution to regional emissions resulting from operation of the WHII project alone is presented in Table 17-3.

Table 17-3 Maximum Unmitigated Contribution of WHII Operational Emissions to Cumulative Conditions		
Pollutant	Project Emissions (lbs/day)	PCAPCD Cumulative Significance Threshold (lbs/day)
ROG	3.93	55
NO _x	8.17	55
PM ₁₀	3.80	82
<i>Source: CalEEMod, April 2018 (see Appendix C).</i>		

As shown in Table 17-3, operational emissions from WHII alone of ROG, NO_x, and PM₁₀ would be below the PCAPCD’s applicable thresholds of significance. As such, operation of WHI alone would not be considered to result in a significant incremental contribution to a cumulative violation of any air quality standards.

WHI and WHII

The cumulative contribution to regional emissions resulting from operation of both the WHI and WHII projects is presented in Table 17-4.

Table 17-4 Maximum Unmitigated Contribution of WHI and WHII Operational Emissions to Cumulative Conditions		
Pollutant	Project Emissions (lbs/day)	PCAPCD Cumulative Significance Threshold (lbs/day)
ROG	5.68	55
NO _x	11.96	55
PM ₁₀	5.58	82
<i>Source: CalEEMod, April 2018 (see Appendix C).</i>		

As shown in Table 17-4, operational emissions from both WHI and WHII of ROG, NO_x, and PM₁₀ would be below the PCAPCD's applicable thresholds of significance. As such, operation of WHI and WHII would not be considered to result in a significant incremental contribution to a cumulative violation of any air quality standards.

Conclusion

Considering the above, the proposed projects, individually or considered together would not result in a significant incremental contribution to a cumulative violation of any air quality standards, contribute substantially to an existing or projected air quality violation, or conflict with and/or obstruct implementation of the PCAPCD's air quality planning efforts. As such, the proposed projects' incremental contribution to regional air quality impacts would be *less than cumulatively considerable*.

Mitigation Measure(s)

None required.

Biological Resources

17-4 Cumulative loss of habitat for special-status species. Based on the analysis below, the projects' incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

Potential cumulative impacts related to biological resources are discussed for each of the proposed projects separately, as well as combined, in the following sections.

WHI

As discussed in Chapter 6, Biological Resources, of this EIR, the WHI project would result in impacts to 0.35-acre of aquatic resources, including wetlands and portions of Strap Ravine, 1.00-acre of previously mined cottonwood stands, 4.40 acres of unmined foothill woodland, 4.60 acres of previously mined foothill woodland, and 0.90-acre previously mined riparian woodland.

Although implementation of the WHI project would result in loss of some existing on-site habitat, substantial portions of the project site, containing 24 percent of the existing foothill woodlands, 72 percent of the existing wetland resources, and 77 percent of the existing riparian woodlands, would be preserved, including areas dedicated as open space within the project site. Consequently, following implementation of the WHI project, the project site would continue to provide habitat for species on-site. Furthermore, Chapter 6 of this EIR contains mitigation measures requiring that pre-construction surveys be conducted to reduce the potential for implementation of the WHI project to result in loss of individual special-status plants or wildlife. Such mitigation measures require that should pre-construction surveys identify special-status species within areas to be impacted by the proposed project, avoidance measures must be implemented to prevent the loss of identified special-status species.

In addition to the habitat being protected within the project site, and the requirement that pre-construction surveys be completed, Chapter 6 of this EIR requires that mitigation credits be purchased to off-set the loss of habitat within the project site. With regard to aquatic resources, Mitigation Measure 6-5(a) requires that credits be purchased at a 1:1 ratio for seasonal wetlands and a 2:1 ratio for sections of Strap Ravine impacted during implementation of the WHI project. In addition to the purchase of mitigation credits for aquatic resource impacts, Mitigation Measure 6-7(a) requires the purchase of mitigation credits for oak woodland impacts at a 2:1 ratio and impacts to cottonwood canopy at a 4:1 ratio. Such mitigation would ensure that while portions of on-site habitat would be lost, a larger amount of habitat within the region would be protected and no net-loss of habitat would occur.

Considering the protection of on-site habitat as well as the requirements for the purchase of mitigation credits and protection of off-site habitat, the WHI project's incremental contribution to the significant cumulative impact of habitat loss within Placer County would be less than cumulatively considerable.

WHII

As discussed in Chapter 6, Biological Resources, of this EIR, the WHII project would result in impacts to 0.93-acre of aquatic resources, including wetlands and portions of Strap Ravine, 0.10-acre of unmined cottonwood stands, 4.10 acres of previously mined cottonwood stands, 8.40 acres of unmined foothill woodland, 8.20 acres of previously mined foothill woodland, and 0.10-acre unmined riparian woodland.

Similar to the WHI project, while the WHII project would result in the loss of some existing on-site habitat, substantial on-site habitat, including 23 percent of existing cottonwood stands, 30 percent of existing foothill woodland, 96 percent of existing riparian woodland, and 63 percent of aquatic resources, would be preserved, such as in areas dedicated as open space within the project site. Additionally, mitigation measures included in Chapter 6 of this EIR require that pre-construction surveys be conducted to reduce the potential for implementation of the WHII project to result in loss of individual special-status plants or wildlife. Similar to the mitigation discussed above for the WHI project, such mitigation measures require that should pre-construction surveys identify special-status species within areas to be impacted by the proposed project, avoidance measures must be implemented to prevent the loss of identified special-status species.

In addition to the habitat being protected within the project site, and the requirement that pre-construction surveys be completed, Chapter 6 of this EIR requires that mitigation credits be purchased to off-set the loss of habitat within the project site. With regard to aquatic resources, Mitigation Measure 6-5(b) requires that credits be purchased at a 1:1 ratio for seasonal wetlands and a 2:1 ratio for sections of Strap Ravine impacted during implementation of the WHII project. In addition to the purchase of mitigation credits for aquatic resource impacts, Mitigation Measure 6-7(a) requires the purchase of mitigation credits for oak woodland impacts at a 2:1 ratio and impacts to cottonwood canopy at a 4:1 ratio. Such mitigation would ensure that while portions of on-site habitat would be lost, a

larger amount of habitat within the region would be protected and no net-loss of habitat would occur.

Considering the protection of on-site habitat as well as the requirements for the purchase of mitigation credits and protection of off-site habitat, the WHII project's incremental contribution to the significant cumulative impact of habitat loss within Placer County would be less than cumulatively considerable.

WHI and WHII

Implementation of both the WHI and WHII projects would result in impacts to 1.28 acres of aquatic resources, including wetlands and portions of Strap Ravine, 0.10-acre of unmined cottonwood stands, 5.10 acres of previously mined cottonwood stands, 12.8 acres of unmined foothill woodland, 12.8 acres of previously mined foothill woodland, 0.10-acre of unmined riparian woodland, and 0.90-acre of previously mined riparian woodland.

Implementation of the combined WHI and WHII projects would include the preservation of 19 percent of existing cottonwoods within previously mined areas, 41 percent of the existing unmined foothill woodland, 12 percent of the existing foothill woodlands within previously mined areas, 97 percent of the existing unmined riparian woodland, 67 percent of the riparian woodlands within previously mined portions of the project site, and 67 percent of the existing wetlands over the combined WHI and WHII project sites, some of which would be preserved within areas designated as open space. Furthermore, implementation of the combined projects would be subject to the same compensatory and pre-construction survey requirements as were discussed for each project above.

Due to the protection of on-site habitat and the requirement that implementation of the WHI and WHII projects include purchase of mitigation credits for the conservation of habitat at as high as a 4:1 ratio, implementation of the proposed projects, while resulting in the loss of on-site habitat, would not result in the cumulative net-loss of habitat. Consequently, the incremental contribution to the significant cumulative impact of habitat loss within Placer County would be less than cumulatively considerable as a result of implementation of the proposed projects.

Conclusion

Based on the foregoing discussion, implementation of the WHI project alone, the WHII project alone, or the WHI and WHII projects combined, would result in the loss of habitat within the GBCP, but such habitat would be compensated for at ratios as high as 4:1. Therefore, implementation of the proposed project would result in a *less than cumulatively considerable* incremental contribution to the significant cumulative impact.

It is also important to note that the anticipated approach for mitigation of impacts related to oak woodlands and cottonwood stands consists of fee contributions to the Placer Land Trust for the purchase of the 331-acre Laursen Outback property within the Lower Bear River Focus Areas of the Spenceville Conceptual Area Protection Plan (CAPP). The

mitigation property supports vegetation communities that are undisturbed, with the exception of light grazing, and are located on a site large enough to consider them self-sustaining. Surrounding lands are undeveloped or protected with the exception of scattered rural residential in the extended vicinity. The site supports oak woodland and savannah with a significantly higher density of native plants, as compared to the project sites, particularly the shrub and herbaceous understory layers. The mitigation property also represents important watershed lands for the Bear River. This is in significant contrast to the primarily disturbed woodlands, each of the proposed projects seek to mitigate.

The off-site mitigation area is also contiguous with a number of already protected lands and would connect the Shutamul Bear River Preserve and the Harvego Bear River Preserve. Although the on-site avoidance area will be protected from development and is expected to continue to act as a corridor for current wildlife even in the developed condition, the mitigation site can create a large permanently conserved linkage between existing reserves, making it a highly desirable and important conservation tool.

Mitigation Measure(s)

None required.

Cultural Resources

17-5 Cumulative loss of cultural resources. Based on the analysis below, the cumulative impact is *less than significant*.

WHI and WHII

Impacts to cultural resources related to implementation of the proposed projects are analyzed in Chapter 7, Cultural Resources, of this EIR. Generally, while some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site would not generally be made worse by impacts to a cultural resource at another site due to development of another project. Rather the resources and the effects upon them are generally independent. A possible exception to the aforementioned general conditions would be where a cultural resource represents the last known example of its kind or is part of larger cultural resources such as a single building along an intact historic Main Street. For such a resource, cumulative impacts, and the contribution of a project to them, may be considered cumulatively significant.

Both project sites contain newly identified bedrock milling stations. As discussed in Chapter 7, of this EIR, the milling stations were analyzed by Natural Investigations and found not to be eligible for NRHP or CRHR listing. Notwithstanding the ineligibility of the foregoing milling stations, both the WHI and WHII projects have been designed to preserve-in-place the bedrock milling stations.

As described in detail in Chapter 7 of this EIR, neither project site contains historical resources that would be eligible for inclusion on the NRHP or considered significant pursuant to CEQA. Furthermore, implementation of the project-specific mitigation measures set forth in Chapter 7 of this EIR (Mitigation Measures 7-2[a] through 7-6) would ensure that any impacts to previously unknown, subsurface cultural resources that are discovered on the project sites during construction activities are reduced to less than significant.

Similar to the proposed projects, future development projects within Granite Bay would be required to implement project-specific mitigation to ensure any potential impacts to identified cultural resources are reduced to a less-than-significant level. Therefore, given that cultural resource impacts are generally site-specific and each future project within Granite Bay would be required to mitigate such impacts, any potential impacts associated with cumulative buildout of the GBCP area would not combine to result in a significant cumulative impact.

Based on the above, the potential for cumulative impacts related to cultural resources, to which the WHI and WHII projects might contribute, would be *less-than-significant* with implementation of site-specific mitigation.

Mitigation Measure(s)
None required.

Geology and Soils/Mineral Resources

17-6 Cumulative increase in the potential for geological related impacts and hazards. Based on the analysis below, the cumulative impact is *less than significant*.

WHI and WHII

Impacts to geology, soils, seismicity, and mineral resources, related to implementation of the proposed projects are analyzed in Chapter 8, Geology and Soils/Mineral Resources of this EIR. While some geologic characteristics may affect regional construction practices, impacts and mitigation measures are primarily site-specific and project-specific. For example, impacts resulting from development on expansive soils at one project site are not worsened by impacts from development on expansive soils or undocumented fill at another project site. Rather, the soil conditions, and the implications of such conditions for each project, are independent.

As such, the potential for cumulative impacts related to geology, soils, seismicity and mineral resources, to which implementation of the WHI and WHII projects might contribute, is *less than significant*.

Mitigation Measure(s)
None required.

Greenhouse Gas Emissions

Greenhouse gases (GHGs) are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the earth's atmosphere. Some GHGs occur naturally and are emitted into the atmosphere through both natural processes and human activities. Other GHGs are created and emitted solely through human activities. The principal GHGs that enter the atmosphere due to human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated carbons. Other common GHGs include water vapor, ozone, and aerosols. Since the beginning of the Industrial Revolution, global atmospheric concentrations of GHGs have increased due to human activities such as the burning of fossil fuels, clearing of forests and other activities. The increase in atmospheric concentrations of GHG due to human activities has resulted in more heat being held within the atmosphere, which is the accepted explanation for global climate change.¹

The primary GHG emitted by human activities is CO₂, with the next largest components being CH₄ and N₂O. The primary sources of CH₄ emissions include domestic livestock sources, decomposition of wastes in landfills, releases from natural gas systems, coal mine seepage, and manure management. The main human activities producing N₂O are agricultural soil management, fuel combustion in motor vehicles, nitric acid production, manure management, and stationary fuel combustion. Emissions of GHG by economic sector indicate that energy-related activities account for the majority of U.S. emissions. Electricity generation is the largest single-source of GHG emissions, and transportation is the second largest source, followed by industrial activities. The agricultural, commercial, and residential sectors account for the remainder of GHG emission sources.² Emissions of GHG are partially offset by uptake of carbon and sequestration in forests, trees in urban areas, agricultural soils, landfilled yard trimmings and food scraps, and absorption of CO₂ by the earth's oceans; however, the rate of emissions of GHGs currently outpaces the rate of uptake, thus causing global atmospheric concentrations to increase.³ Attainment concentration standards for GHGs have not been established by the federal or State government.

Global Warming Potential

Global Warming Potential (GWP) is one type of simplified index (based upon radiative properties) that can be used to estimate the potential future impacts of emissions of various gases. According to the U.S. Environmental Protection Agency (USEPA), the global warming potential of a gas, or aerosol, to trap heat in the atmosphere is the "cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas." The reference gas for comparison is CO₂. GWP is based on a number of factors, including the heat-absorbing ability of each gas relative to that of CO₂, as well as the decay rate of each gas relative to that of CO₂. Each gas's GWP is determined by comparing the radiative forcing

¹ U.S. Environmental Protection Agency. Climate Change Indicators: Atmospheric Concentrations of Greenhouse Gases. Available at <https://www.epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases>. Accessed November 17, 2016.

² U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: <http://epa.gov/climatechange/ghgemissions/sources/industry.html>. Accessed August 2016.

³ U.S. Environmental Protection Agency. Climate Change Indicators: Atmospheric Concentrations of Greenhouse Gases. Available at <https://www.epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases>. Accessed November 17, 2016.

associated with emissions of that gas versus the radiative forcing associated with emissions of the same mass of CO₂, for which the GWP is set at one. Methane gas, for example, is estimated by the USEPA to have a comparative global warming potential 25 times greater than that of CO₂, as shown in Table 17-5.

Table 17-5 Global Warming Potentials and Atmospheric Lifetimes of Select GHGs		
Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide (CO ₂)	50-200 ¹	1
Methane (CH ₄)	12	25
Nitrous Oxide (N ₂ O)	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF ₄)	50,000	7,390
PFC: Hexafluoroethane (C ₂ F ₆)	10,000	12,200
Sulfur Hexafluoride (SF ₆)	3,200	22,800
Note: ¹ For a given amount of CO ₂ emitted, some fraction of the atmospheric increase in concentration is quickly absorbed by the oceans and terrestrial vegetation, some fraction of the atmospheric increase will only slowly decrease over a number of years, and a small portion of the increase will remain for many centuries or more.		
<i>Source: USEPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013, April 15, 2015.</i>		

As shown in the table, at the extreme end of the scale, sulfur hexafluoride is estimated to have a comparative GWP 22,800 times that of CO₂. The “specified time horizon” is related to the atmospheric lifetimes of such GHGs, which are estimated by the USEPA to vary from 50 to 200 years for CO₂, to 50,000 years for tetrafluoromethane. Longer atmospheric lifetimes allow GHG to buildup in the atmosphere; therefore, longer lifetimes correlate with the global warming potential of a gas. The common indicator for GHG is expressed in terms of metric tons of CO₂ equivalents (MTCO_{2e}).

Effects of Global Climate Change

Uncertainties exist as to exactly what the climate changes will be in various local areas of the Earth. According to the Intergovernmental Panel on Climate Change’s Working Group II Report, *Climate Change 2007: Impacts, Adaptation and Vulnerability*,⁴ as well as the California Natural Resources Agency’s report *Safeguarding California: Reducing Climate Risk*⁵ climate change impacts to California may include:

⁴ Intergovernmental Panel on Climate Change. *Climate Change 2007: Impacts, Adaptation, and Vulnerability*. 2007.

⁵ California Natural Resources Agency. *Safeguarding California: Reducing Climate Risk*. July 2014.

- Increasing evaporation;
- Rearrangement of ecosystems as species and ecosystems shift northward and to higher elevations;
- Increased frequency, duration, and intensity of conditions conducive to air pollution formation (particularly ozone);
- Reduced precipitation, changes to precipitation and runoff patterns, reduced snowfall (precipitation occurring as rain instead of snow), earlier snowmelt, decreased snowpack, and increased agricultural demand for water;
- Increased experiences of heat waves;
- Increased growing season and increased growth rates of weeds, insect pests and pathogens;
- Inundation by sea level rise, and exacerbated shoreline erosion; and
- Increased incidents and severity of wildfire events and expansion of the range and increased frequency of pest outbreaks.

Analysis of GHGs and Global Climate Change

Analysis of global climate change presents the challenge of analyzing the relationship between local and global activities. GHGs are not generally thought of as traditional air pollutants because GHGs, and their impacts, are global in nature, while air pollutants affect the health of people and other living things at ground level, in the general region of their release to the atmosphere. Accordingly, the issue of global climate change is different from any other areas of air quality impact analysis. A global climate change analysis must be conducted on a global level, rather than the typical local or regional setting, and requires consideration of not only emissions from the project under consideration, but also the extent of the displacement, translocation, and redistribution of emissions.

In the usual context, where air quality is linked to a particular location or area, considering the creation of new emissions in that specific area to be an environmental impact whether or not the emissions are truly “new” emissions to the overall globe is appropriate. In fact, the approval of a new developmental plan or project does not necessarily create new automobile drivers – the primary source of a land use project’s emissions. Rather, a new land use project may simply be redistributing existing mobile emissions. For example, future residents at the project site could already be residing within the County or region and would be moving from other parts of the region to the project site, which could result in shorter or longer associated vehicle trips, but would not introduce new vehicle trips to the overall region. Accordingly, the use of models that measure overall emissions increases without accounting for existing emissions would substantially overstate the impact of the development project on global climate change. Nevertheless, presenting all GHG emissions from the proposed projects, including those emissions that may simply be relocated from other areas of the region to the project site, provides a worst-case analysis, and allows decision makers and the public to consider the full scope of GHG emissions that would result from the proposed projects.

Regulatory Context

Global climate change and energy are monitored through the efforts of various international, federal, State, and local government agencies. Agencies work jointly and individually to improve current conditions through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for regulating global climate change and energy within the project area are discussed below.

Federal

The most prominent federal regulation is the Federal Clean Air Act (FCAA), which is implemented and enforced by the USEPA.

FCAA and USEPA

The FCAA requires the USEPA to set NAAQS and designate areas with air quality not meeting NAAQS as nonattainment. The USEPA is responsible for enforcement of NAAQS for atmospheric pollutants and regulates emission sources that are under the exclusive authority of the federal government including emissions of GHGs. The USEPA's air quality mandates are drawn primarily from the FCAA, which was signed into law in 1970. Congress substantially amended the FCAA in 1977 and again in 1990. The USEPA has adopted policies consistent with FCAA requirements demanding states to prepare SIP that demonstrate attainment and maintenance of the NAAQS.

The USEPA has been directed to develop regulations to address the GHG emissions of cars and trucks. The Mandatory Reporting of Greenhouse Gases Rule requires reporting of GHG emissions from large sources and suppliers in the U.S., and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHG, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the USEPA. To track the national trend in emissions and removals of GHG since 1990, USEPA develops the official U.S. GHG inventory each year.

On December 7, 2009, USEPA issued findings under Section 202(a) of the CAA concluding that GHGs are pollutants that could endanger public health. Under the so-called Endangerment Finding, USEPA found that the current and projected concentrations of the six key well-mixed GHGs – CO₂, CH₄, N₂O, PFCs, SF₆, and HFCs – in the atmosphere threaten the public health and welfare of current and future generations. These findings do not, by themselves, impose any requirements on industry or other entities.

State Regulations

California has adopted a variety of regulations aimed at reducing GHG emissions. The adoption and implementation of the key State legislation described in further detail below demonstrates California's leadership in addressing global climate change. Only the most prominent and applicable California GHG-related legislation are included below; however,

an exhaustive list and extensive details of California air quality legislation could be found at the California Air Resources Board (CARB) website.⁶

AB 1493

California AB 1493 (Stats. 2002, ch. 200) (Health & Safety Code, §§42823, 43018.5), known as Pavley I, was enacted on July 22, 2002. AB 1493 requires that the CARB develop and adopt regulations that achieve “the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by the CARB to be vehicles whose primary use is noncommercial personal transportation in the state.” On June 30, 2009, the USEPA granted a waiver of CAA preemption to California for the State’s GHG emission standards for motor vehicles, beginning with the 2009 model year. Pursuant to the CAA, the waiver allows for the State to have special authority to enact stricter air pollution standards for motor vehicles than the federal government’s. On September 24, 2009, the CARB adopted amendments to the Pavley regulations (Pavley I) that reduce GHG emissions in new passenger vehicles from 2009 through 2016. The second phase of the Pavley regulations (Pavley II) is expected to affect model year vehicles from 2016 through 2020. The CARB estimates that the regulation would reduce GHG emissions from the light-duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030.

Renewable Portfolio Standard (RPS)

Established in 2002 under Senate Bill (SB) 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2, California’s Renewables Portfolio Standard (RPS) is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Since the inception of the RPS program, the program has been extended and enhanced multiple times. In 2015, SB 350 extended the State’s RPS program by requiring that publicly owned utilities procure 50 percent of their electricity from renewable energy sources by 2030. The requirements of SB 350 were expanded and intensified in 2018 through the adoption of SB 100, which mandated that all electricity generated within the State by publicly owned utilities be generated through carbon-free sources by 2045. In addition, SB 100 increased the previous renewable energy requirement for the year 2030 by 10 percent; thus, requiring that 60 percent of electricity generated by publicly owned utilities originate from renewable sources by 2030.

⁶ California Air Resources Board. *Laws and Regulations*. Available at: <http://www.arb.ca.gov/html/lawsregs.htm>. Accessed February 2018.

Executive Order S-03-05

On June 1, 2005, then-Governor Schwarzenegger signed Executive Order S-03-05, which established total GHG emission targets. Specifically, emissions are to be reduced to year 2000 levels by 2010, 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. The Executive Order directed the Secretary of the California Environmental Protection Agency (Cal-EPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary is also directed to submit biannual reports to the governor and state legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts.

To comply with the Executive Order, the Secretary of the Cal-EPA created a Climate Action Team (CAT) made up of members from various State agencies and commissions. In March 2006, CAT released their first report. In addition, the CAT has released several "white papers" addressing issues pertaining to the potential impacts of climate change on California.

Assembly Bill 32

In September 2006, Assembly Bill (AB) 32, the California Climate Solutions Act of 2006, was enacted (Stats. 2006, ch. 488) (Health & Saf. Code, §38500 et seq.). AB 32 delegated the authority for its implementation to the CARB and directs CARB to enforce the State-wide cap. Among other requirements, AB 32 required CARB to (1) identify the State-wide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020, and (2) develop and implement a Scoping Plan. Accordingly, the CARB has prepared the *Climate Change Scoping Plan* (Scoping Plan) for California, which was approved in 2008 and updated in 2014 and 2017.⁷ The following sections present further information regarding plans and programs that have been introduced in order to meet the statutory requirements of AB 32.

California Scoping Plan

The 2008 Scoping Plan identified GHG reduction measures that would be necessary to reduce statewide emissions as required by AB 32. Many of the GHG reduction measures identified in the 2008 Scoping Plan have been adopted, such as the Low Carbon Fuel Standard, Pavley, Advanced Clean Car standards, RPS, and the State's Cap-and-Trade system.

Building upon the 2008 Scoping Plan, the 2013 and 2017 Scoping Plan Updates introduced new strategies and recommendations to continue GHG emissions reductions. The 2013 Scoping Plan Update created a framework for achievement of 2020 GHG reduction goals, and identified actions that may be built upon to

⁷ California Air Resources Board. *AB 32 Scoping Plan*. Available at: <https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>. Accessed February 2018.

continue GHG reductions past 2020, as required by AB 32. Following the 2013 Scoping Plan, the 2017 Scoping Plan sets a path for the achievement of California's year 2030 GHG reduction goals.

California GHG Cap-and-Trade Program

California's GHG Cap-and-Trade Program was originally envisioned in the 2008 Scoping Plan as a key strategy to achieve GHG emissions reductions mandated by AB 32. The Cap-and-Trade Program is intended to put California on the path to meet the GHG emission reduction goal of 1990 levels by the year 2020, and ultimately achieving an 80 percent reduction from 1990 levels by 2050. Under cap-and-trade, an overall limit on GHG emissions from capped sectors has been established and facilities or industries subject to the cap are able to trade permits (allowances) to emit GHGs. The CARB designed the California Cap-and-Trade Program to be enforceable and to meet the requirements of AB 32.⁸ The Program started on January 1, 2012, with an enforceable compliance obligation beginning with the 2013 GHG emissions. On January 1, 2014 California linked the state's cap-and-trade plan with Quebec's, and on January 1, 2015 the program expanded to include transportation and natural gas fuel suppliers.⁹ AB 398 was adopted by the State's legislature in July 2017, which reauthorized the Cap-and-Trade program through December 31, 2030. The reauthorization and continued operation of the Cap-and-Trade program represents a key strategy within the State's 2017 Scoping Plan Update for the achievement of California's year 2030 GHG reduction goals.

Executive Order S-01-07

On January 18, 2007, then-Governor Schwarzenegger signed Executive Order S-01-07, which mandates that a State-wide goal be established to reduce carbon intensity of California's transportation fuels by at least 10 percent by 2020. The Order also requires that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California.

SB 97

As amended, SB 97, signed in August 2007, acknowledges that climate change is an important environmental issue that requires analysis under CEQA. The bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. As directed by SB 97, the OPR amended the CEQA Guidelines to provide guidance to public agencies regarding the analysis and mitigation of GHG emissions and the effects of GHG emissions in CEQA documents. The amendments included revisions to the *Appendix G Initial Study Checklist* that incorporated a new

⁸ California Air Resources Board. *Overview of ARB Emissions Trading Program*. Available at: https://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf. Accessed February 2018.

⁹ *Ibid.*

subdivision to address project-generated GHG emissions and contribution to climate change. The new subdivision emphasizes that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. Under the revised CEQA Appendix G checklist, an agency should consider whether a project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and whether a project conflicts with an applicable plan, policy, or regulation adopted for the purpose of reducing emission of GHGs.

Further guidance based on SB 97 suggests that the lead agency make a good-faith effort, based on available information, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. When assessing the significance of impacts from GHG emissions on the environment, lead agencies should consider the extent to which the project may increase or reduce GHG, as compared to the existing environmental setting, whether the project emissions exceed a threshold of significance determined applicable to the project, and/or the extent to which the project complies with adopted regulations or requirements to implement a state wide, regional, or local plan for the reduction or mitigation of GHG emissions. Feasible mitigation under SB 97 includes on-site and off-site measures, such as GHG emission-reducing design features and GHG sequestration.

SB 375

In September 2008, SB 375, known as the Sustainable Communities and Climate Protection Act of 2008, was enacted, which is intended to build on AB 32 by attempting to control GHG emissions by curbing sprawl. SB 375 enhances CARB's ability to reach goals set by AB 32 by directing CARB to develop regional GHG emission reduction targets to be achieved by the State's 18 metropolitan planning organizations (MPOs), including the Sacramento Area Council of Governments (SACOG). Under SB 375, MPOs must align regional transportation, housing, and land-use plans and prepare a "Sustainable Communities Strategy" (SCS) to reduce the amount of vehicle miles traveled in their respective regions and demonstrate the region's ability to attain its GHG reduction targets. SB 375 provides incentives for creating walkable and sustainable communities and revitalizing existing communities, and allows home builders to get relief from certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Furthermore, SB 375 encourages the development of alternative transportation options, which will reduce traffic congestion.

Executive Order S-13-08

Then-Governor Arnold Schwarzenegger issued Executive Order S-13-08 on November 14, 2008. The Executive Order is intended to hasten California's response to the impacts of global climate change, particularly sea level rise, and directs state agencies to take specified actions to assess and plan for such impacts, including requesting the National Academy of Sciences to prepare a Sea Level Rise Assessment Report, directing the Business, Transportation, and Housing Agency to assess the vulnerability of the State's transportation systems to sea level rise, and requiring the Office of Planning and Research

and the Natural Resources Agency to provide land use planning guidance related to sea level rise and other climate change impacts.

The order also required State agencies to develop adaptation strategies to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. The adaptation strategies report summarizes key climate change impacts to the State for the following areas: public health; ocean and coastal resources; water supply and flood protection; agriculture; forestry; biodiversity and habitat; and transportation and energy infrastructure. The report recommends strategies and specific responsibilities related to water supply, planning and land use, public health, fire protection, and energy conservation.

AB 197 and SB 32

On September 8, 2016, AB 197 and SB 32 were enacted with the goal of providing further control over GHG emissions in the State. SB 32 built on previous GHG reduction goals by requiring that the CARB ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by the year 2030. Additionally, SB 32 emphasized the critical role that reducing GHG emissions would play in protecting disadvantaged communities and the public health from adverse impacts of climate change. Enactment of SB 32 was predicated on the enactment of AB 197, which seeks to make the achievement of SB 32's mandated GHG emission reductions more transparent to the public and responsive to the Legislature. Transparency to the public is achieved by AB 197 through the publication of an online inventory of GHG and TAC emissions from facilities required to report such emissions pursuant to Section 38530 of California's Health and Safety Code. AB 197 further established a six-member Joint Legislative Committee on Climate Change Policies, which is intended to provide oversight and accountability of the CARB, while also adding two new legislatively-appointed, non-voting members to the CARB. Additionally, AB 197 directs the CARB to consider the "social costs" of emission reduction rules and regulations, with particular focus on how such measures may impact disadvantaged communities.

California Building Standards Code

California's building codes (California Code of Regulations [CCR], Title 24) are published on a triennial basis, and contain standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The California Building Standards Commission is responsible for the administration and implementation of each cycle of the California Building Standards Code (CBSC), which includes the proposal, review, and adoption process. Supplements and errata are issued throughout the cycle to make necessary mid-term corrections. The 2016 code has been prepared and became effective January 1, 2017. The California building code standards apply State-wide; however, a local jurisdiction may amend a building code standard if the jurisdiction makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

California Green Building Standards Code

The 2016 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the CBSC, which became effective with the rest of the CBSC on January 1, 2017. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California.

The CALGreen Code encourages local governments to adopt more stringent voluntary provisions, known as Tier 1 and Tier 2 provisions, to further reduce emissions, improve energy efficiency, and conserve natural resources. If a local government adopts one of the tiers, the provisions become mandates for all new construction within that jurisdiction. Placer County has not adopted any voluntary provisions of the CALGreen Code to date.

Building Energy Efficiency Standards

The 2016 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy efficiency measures from the 2013 Building Energy Efficiency Standards resulting in a 28 percent reduction in energy consumption from the 2013 standards for residential structures. Energy reductions relative to previous Building Energy Efficiency Standards would be achieved through various regulations including requirements for the use of high efficacy lighting, improved water heating system efficiency, and high-performance attics and walls.

The 2019 Building Energy Efficiency Standards will take effect on January 1, 2020. The 2019 Building Energy Efficiency Standards are intended to improve upon the 2016 standards for residential and non-residential buildings. One of the improvements included within the 2019 Building Energy Efficiency Standards will be the requirement that certain residential developments, including some single-family and low-rise residential developments, include on-site solar energy systems capable of producing 100 percent of the electricity demanded by the residences. Certain residential developments, including developments that are subject to substantial shading, rendering the use of on-site solar photovoltaic systems infeasible, are exempted from the foregoing requirement; however, such developments would continue to be subject to all other applicable portions of the 2019 Building Energy Efficiency Standards.

Local Regulations

The PCAPCD is the principal agency involved with the regulation of GHG emissions within Placer County.

Placer County Air Pollution Control District

Various local, regional, State and federal agencies share the responsibility for air quality management in Placer County. The PCAPCD operates at the local level and is tasked with enforcing the implementation of federal and State programs and regulations. The PCAPCD works jointly with the USEPA, CARB, other air districts in the region, county and city transportation and planning departments, and various non-governmental organizations to work towards improving global climate change through a variety of programs. Programs include the adoption of regulations, policies and guidance, extensive education and public outreach programs, as well as emission reducing incentive programs.

Standards of Significance

Nearly all development projects in the region have the potential to generate air pollutants that may increase global climate change. On October 13, 2016, the PCAPCD adopted GHG emissions thresholds. The thresholds were designed to analyze a project’s compliance with applicable state laws including AB 32 and SB 32.¹⁰ The GHG thresholds include a bright-line threshold for the construction and operational phases of land use projects and stationary source projects, a screening level threshold for the operational phase of land use projects, and efficiency thresholds for the operational phase of land use projects that result in GHG emissions that fall between the bright-line threshold and the screening level threshold. The bright-line threshold of 10,000 MTCO_{2e}/yr represents the level at which a project’s GHG emissions would be substantially large enough to contribute to cumulative impacts and mitigation to lessen the emissions would be mandatory. The PCAPCD further recommends use of the 10,000 MTCO_{2e}/yr for analysis of construction-related GHG emissions for land use projects. Any project with GHG emissions below the screening level threshold of 1,100 MTCO_{2e}/yr is judged by the PCAPCD as having a less-than-significant impact related to GHG emissions, and would not conflict with any State or regional GHG emissions reduction goals. Projects that would result in GHG emissions above the 1,100 MTCO_{2e}/yr screening level threshold, but below the bright-line threshold of 10,000 MTCO_{2e}/yr, must result in GHG emissions below the efficiency thresholds in order to be considered to result in a less-than-significant impact related to GHG emissions and not conflict with any State or regional GHG emissions reduction goals. The GHG efficiency thresholds, which are in units of MTCO_{2e}/yr per capita or per square-foot, are presented in Table 17-6.

Table 17-6			
PCAPCD Operational GHG Efficiency Thresholds of Significance			
Residential (MTCO_{2e}/capita)		Non-Residential (MTCO_{2e}/1,000 sf)	
Urban	Rural	Urban	Rural
4.5	5.5	26.5	27.3
<i>Source: Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. October 13, 2016.</i>			

In accordance with CARB and PCAPCD recommendations, the County, as lead agency, uses the currently adopted PCAPCD GHG thresholds of significance as presented above. Therefore, if the

¹⁰ Placer County Air Pollution Control District. *California Environmental Quality Act Thresholds of Significance: Justification Report*. October 2016.

proposed projects result in construction GHG emissions, separately or considered together, in excess of 10,000 MTCO_{2e}/yr, and/or operational GHG emissions in excess of 1,100 MTCO_{2e}/yr and are unable to show that emissions would achieve the efficiency thresholds presented in Table 17-6, the projects would be considered to result in a cumulatively considerable contribution to global climate change.

Method of Analysis

The analysis of construction and operational emissions described below includes the evaluation of the impacts of the two projects, WHI and WHII, as well as the impacts of the two projects combined. The GHG emissions resulting from implementation of the proposed projects were estimated separately and together using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 software - a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the ITE Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data was input into the model. Furthermore, per the PCAPCD's guidance,¹¹ construction of roadway improvements and linear utility work was completed through the use of the Sacramento Metropolitan Air Quality Management District's (SMAQMD's) Roadway Construction Emissions Model (RoadMod).¹²

Project Construction GHG Emissions

Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. Because GHG emissions from construction are temporary in nature and result in only short-term impacts, the PCAPCD uses the bright-line threshold of 10,000 MTCO_{2e}/yr for the analysis of land use project construction GHG emissions. As discussed in Chapter 5, Air Quality, of this EIR, construction of the proposed projects was modeled individually for the WHI and WHII projects and together. The assumptions used in the estimation of construction related emissions are presented in the Method of Analysis section of Chapter 5 of this EIR, Air Quality.

Long-Term Operational GHG Emissions

Emissions related to operation of WHI and WHII separately and combined were estimated using CalEEMod. Based on the construction information provided by the project applicant, should the proposed projects be constructed separately, either project would be anticipated to be fully operational by 2021. To provide a conservative analysis and maintain consistency between the project scenarios, potential emissions related to operations of the combined projects were modeled for the year 2021. The modeling performed for the

¹¹ Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 29]. November 21, 2017.

¹² Sacramento Metropolitan Air Quality Management District. *Roadway Construction Emissions Model*. May 2016.

proposed projects included compliance with the California Building Energy Efficiency Standards Code. The proposed projects' compliance with the California Building Energy Efficiency Standards Code would be verified as part of the County's building approval review process. The project-specific trip generation rates¹³ and vehicle miles travelled (VMT)¹⁴ provided by Fehr and Peers were also applied to the project modeling. The CO₂ intensity factor within CalEEMod were adjusted in order to reflect PG&E's progress towards the State RPS goal by the operational year for each project scenario. It should be noted that due to differing construction periods, project modeling for implementation of the WHI project only and for the WHII project only was adjusted to reflect an initial year of operation of 2021, while the initial operational year for the combined operations of WHI and WHII was set to 2022.

The California Energy Commission recently approved updates to 2019 CBSC. The 2019 CBSC will take effect January 1, 2020, and all buildings constructed following January 1, 2020 must be built in compliance with the 2019 CBSC. The 2019 CBSC includes various provisions that would increase the energy efficiency of new buildings within California. Included in the updates for the 2019 CBSC is a requirement that all new low-rise residential structures (i.e., structures containing three or fewer stories) must include photovoltaic (PV) systems with annual output equal to or greater than the dwelling's annual electrical usage.¹⁵ However, given that homes anticipated to receive excessive shade during the daytime could be exempt from the PV system requirements, installation of PV systems on all of the proposed residences cannot be guaranteed at this time. Nonetheless, given that the existing oak woodlands would be removed within the residential development area, it is reasonable to anticipate that a substantial number of homes would be required to include PV systems. Nevertheless, in order to provide a conservative analysis with regard to the extent of energy provided by future on-site PV systems, the project modeling was adjusted to reflect the generation of a total of only five percent of the electricity demand for the combined projects through on-site renewable energy systems.

The results of emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod modeling results are included in Appendix C to this EIR.

Impacts and Mitigation Measures

The following discussion of GHG emissions impacts is based on implementation of the proposed projects in comparison to the standards of significance presented above.

¹³ Fehr and Peers. *Final Transportation Impact Study for Whitehawk I & II*. September 2018.

¹⁴ Robinson, David, P.E., Principal, Fehr and Peers. Personal communication [email] with Nick Pappani, Vice President, Raney Planning & Management. October 15, 2018.

¹⁵ California Energy Commission. *2019 Title 24, Part 6, Building Energy Efficiency Standards Rulemaking*. April 23, 2018.

17-7 Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Based on the analysis below the project’s incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

Buildout of the proposed projects would contribute to increases of GHG emissions that are associated with global climate change during construction and operations. As discussed in the Method of Analysis section, the modeling assumed that both on-site and off-site construction would occur during implementation of the proposed projects. The estimated emissions for the separate construction of WHI and WHII are presented below as well as the estimated emissions from the combined construction of WHI and WHII.

WHI Short-Term Construction GHG Emissions

The estimated unmitigated maximum construction-related emissions for the WHI project are presented Table 17-7. As shown in the table, the short-term emissions related to on-site construction of WHI only would be below the applicable threshold of significance.

Table 17-7		
Unmitigated WHI On-site Construction GHG Emissions		
Year	GHG Emissions (MTCO_{2e}/yr)	Threshold of Significance (MTCO_{2e}/yr)
2019	264.39	10,000
2020	161.85	10,000

Source: CalEEMod, October 2018 (see Appendix C).

As shown in the table above, the maximum annual emissions related to implementation of WHI only are anticipated to occur in the year 2019. However, even in 2019, the construction-related GHG emissions would be well below the PCAPCD’s bright-line threshold of 10,000 MTCO_{2e}/yr. Furthermore, off-site construction work related to water line improvements were estimated by RoadMod to involve the emission of an additional 32.79 MTCO_{2e}. If such emissions were to occur within 2019, the maximum annual GHG emissions from construction of WHI would equal 297.18 MTCO_{2e}. Considering the off-site construction emissions as well as on-site construction-related emissions, WHI would result in GHG emissions below the PCAPCD’s bright-line threshold of 10,000 MTCO_{2e}/yr.

WHII Short-Term Construction GHG Emissions

The estimated unmitigated maximum construction-related emissions for the WHII project are presented Table 17-8. As shown in the table, the short-term emissions related to on-site construction of WHII only would be below the applicable threshold of significance.

Table 17-8		
Unmitigated WHII On-site Construction GHG Emissions		
Year	GHG Emissions (MTCO_{2e}/yr)	Threshold of Significance (MTCO_{2e}/yr)
2019	519.86	10,000
2020	244.79	10,000

Source: CalEEMod, October 2018 (see Appendix C).

As shown in the table above, the maximum annual emissions related to implementation of WHII only are anticipated to occur in the year 2019. However, even in 2019, the construction-related GHG emissions would be well below the PCAPCD’s bright-line threshold of 10,000 MTCO_{2e}/yr. Furthermore, off-site construction work related to water line improvements and median work within Douglas Boulevard were estimated by RoadMod to involve the emission of an additional 92.43 MTCO_{2e}. If such emissions were to occur within 2019, the maximum annual GHG emissions from construction of WHII only would equal 612.29 MTCO_{2e} in 2019. Considering the off-site construction emissions as well as on-site construction-related emissions, WHII would result in GHG emissions below the PCAPCD’s bright-line threshold of 10,000 MTCO_{2e}/yr.

WHI and WHII Short-Term Construction GHG Emissions

The estimated unmitigated maximum construction-related emissions for the combined WHI and WHII project are presented Table 17-9. As shown in the table, the short-term emissions related to on-site construction of WHI and WHII would be below the applicable threshold of significance.

Table 17-9		
Unmitigated WHI and WHII On-site Construction GHG Emissions		
Year	GHG Emissions (MTCO_{2e}/yr)	Threshold of Significance (MTCO_{2e}/yr)
2019	632.66	10,000
2020	397.94	10,000
2021	211.91	10,000

Source: CalEEMod, October 2018 (see Appendix C).

As shown in the table above, the maximum annual emissions related to implementation of WHI and WHII are anticipated to occur in the year 2019. However, even in 2019, the construction-related GHG emissions would be well below the PCAPCD’s bright-line threshold of 10,000 MTCO_{2e}/yr. Furthermore, off-site construction work related to water line improvements, median improvements within Douglas Boulevard, and widening of certain sections of Douglas Boulevard near the intersection of Douglas Boulevard and Cavitt Stallman Road as well as Sierra College Boulevard, were estimated by RoadMod to involve the emission of approximately 300.7 MTCO_{2e}. If such emissions were to occur within 2019, the maximum annual GHG emissions from construction of WHI only would equal 933.36 MTCO_{2e} in 2019. Considering the off-site construction emissions as well as on-site construction-related emissions, combined construction of WHI and WHII would result in GHG emissions below the PCAPCD’s bright-line threshold of 10,000 MTCO_{2e}/yr.

WHI Only Long-Term Operational GHG Emissions

The modeling assumptions for the GHG emissions related to operations of WHI only are discussed in the Methods and Assumptions section above. The estimated operational GHG emissions at full buildout (2021) of WHI only are presented in Table 17-10.

Table 17-10	
Unmitigated WHI Operational GHG Emissions (MTCO_{2e}/yr)	
Emission Source	GHG Emissions
Area	0.30
Energy	59.10
Mobile	269.14
Solid Waste	11.95
Water	3.65
TOTAL ANNUAL GHG EMISSIONS	344.13¹
Note: ¹ Rounding may result in small differences in summation.	
<i>Source: CalEEMod, October 2018 (see Appendix C).</i>	

As shown in the table, operation of WHI would result in GHG emissions of 344.13 MTCO_{2e}/yr, which would be below the 1,100 MTCO_{2e}/yr threshold of significance. Therefore, the operation of WHI only would not be expected to result in a significant impact related to operational GHG emissions.

WHII Only Long-Term Operational GHG Emissions

The modeling assumptions for the GHG emissions related to operations of WHII only are discussed in the Methods and Assumptions section above. The estimated operational GHG emissions at full buildout (2021) of WHII only are presented in Table 17-11.

Table 17-11	
Unmitigated WHII Operational GHG Emissions (MTCO_{2e}/yr)	
Emission Source	GHG Emissions
Area	0.68
Energy	132.47
Mobile	610.80
Solid Waste	27.16
Water	8.35
TOTAL ANNUAL GHG EMISSIONS	779.47¹
Note: ¹ Rounding may result in small differences in summation.	
<i>Source: CalEEMod, October 2018 (see Appendix C).</i>	

As shown in the table, operation of WHII would result in GHG emissions of 779.47 MTCO_{2e}/yr, which would be below the 1,100 MTCO_{2e}/yr threshold of significance.

Therefore, the operation of WHII only would not be expected to result in a significant impact related to operational GHG emissions.

WHI and WHII Long-Term Operational GHG Emissions

The modeling assumptions for the GHG emissions related to operations of the combined WHI and WHII projects are discussed in the Methods and Assumptions section above. The estimated operational GHG emissions at full buildout (2022) of the combined projects are presented in Table 17-12.

Table 17-12	
Unmitigated WHI and WII Operational GHG Emissions (MTCO_{2e}/yr)	
Emission Source	GHG Emissions
Area	0.98
Energy	186.92
Mobile	859.18
Solid Waste	39.11
Water	11.79
TOTAL ANNUAL GHG EMISSIONS	1,097.98¹
Note: ¹ Rounding may result in small differences in summation.	
<i>Source: CalEEMod, October 2018 (see Appendix C).</i>	

As shown in the table, operation of WHI and WHII would result in GHG emissions of 1,097.98 MTCO_{2e}/yr, which would be below the 1,100 MTCO_{2e}/yr threshold of significance. Therefore, the operation of combined WHI and WHII projects would not be expected to result in a significant impact related to operational GHG emissions.

Conclusion

Because the construction-related GHG emissions from construction of WHI only, WHII only, and the combined projects would be below 10,000 MTCO_{2e}/yr, the proposed projects would not be expected to have a cumulatively considerable contribution to a significant cumulative GHG impact during construction.

As shown in the tables above, operations of WHI only WHII only, and the combined projects would result in operational GHG emissions below the applicable PCAPCD thresholds of significance. Therefore, the proposed projects, either individually or combined, would not be considered to generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Consequently, the projects would not result in a cumulatively considerable incremental contribution to impacts related to GHG emissions or climate change and the projects' impact would be *less than cumulatively considerable*.

Mitigation Measure(s)
None required.

Hazards and Hazardous Materials

- 17-8 Cumulative exposure to potential hazards and increases in the transport, storage, and use of hazardous materials. Based on the analysis below, the cumulative impact is *less than significant*.**

WHI and WHII

Impacts associated with hazardous materials related to implementation of the proposed projects are analyzed in Chapter 9 of this EIR. All project-specific impacts related to hazards and hazardous materials were found to be less than significant with implementation of mitigation measures set forth in the chapter. Hazardous materials and other public health and safety issues are generally site-specific and/or project-specific, and would not be significantly affected by other development within the project area. Cumulative development projects would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed projects, which would minimize potential risks associated with increased hazardous materials use in the community. Therefore, impacts associated with hazardous materials transport, storage, and use associated with implementation of past, present, and reasonably foreseeable future projects, as well as the proposed projects, would be *less than significant*.

Mitigation Measure(s)
None required.

Hydrology and Water Quality

- 17-9 Cumulative impacts related to water quality. Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.**

Construction activities have the potential to affect water quality and contribute to localized violations of water quality standards if stormwater runoff from construction activities enters receiving waters. Additional runoff from construction sites could carry sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products, which could result in water quality degradation if runoff containing such sediment or contaminants should enter receiving waters in sufficient quantities. Thus, construction activities associated with the proposed projects, in combination with construction activities associated with other reasonably foreseeable projects in the Dry Creek watershed, including buildout of the GBCP, could result in cumulative impacts related to water quality.

Similar to the WHI and WHII projects, cumulative development within the Dry Creek watershed would be subject to Phase II MS4 stormwater requirements, including source

control and treatment control features, as well as the State General Construction Permit. Specifically, regulated projects are required to divide the project area into drainage management areas (DMAs) and implement and direct water to appropriately-sized site design measures (SDMs) and Baseline Hydromodification Measures to each DMA. For projects within unincorporated Placer County, source control measures must be designed for pollutant-generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and must be shown on Improvement Plans.

WHI

Based on the conceptual stormwater design, the WHI project would properly treat stormwater runoff prior to discharging such runoff to Strap Ravine in the project vicinity. Thus, urban pollutants entering and potentially polluting the local drainage system would not be expected to occur as a result of the project. The WHI project would be subject to National Pollutant Discharge Elimination System (NPDES) Construction General Permit requirements, including implementation of best management practices (BMPs) and preparation of a site-specific Stormwater Pollution Prevention Plan (SWPPP). Compliance with the State NPDES Construction General Permit and Article 8.28 and 15.48 of the Placer County Code, as required by Mitigation Measures 8-2(b), 8-2(c), 8-4(a), and 8-4(b), would minimize the potential degradation of stormwater quality and downstream surface water associated with construction of the WHI project. Thus, the WHI project's contribution to the significant cumulative impact would be less than cumulatively considerable.

WHII

The WHII project would include a larger overall development area than the WHI project and, thus, would have a greater potential to discharge polluted runoff to downstream waterways. However, the WHII project would be subject to the same regulations related to water quality as the WHI project, as required by Mitigation Measures 8-2(b), 8-2(c), 8-4(a), and 8-4(b). Thus, the WHII project's contribution to the significant cumulative impact would be less than cumulatively considerable.

WHI and WHII

Both the WHI and WHII projects would be subject to State and local water quality regulations, whose robustness is sufficient to ensure that the combined water quality effects of the Whitehawk projects would not be cumulatively considerable. With respect to construction operations, both projects would comply with the State's NPDES Construction General Permit, requiring implementation of a stormwater pollution prevention plan during construction activities. During operation, neither project would directly discharge stormwater into receiving waters. Rather, on-site runoff would be treated in bio-retention basins prior to entering the downstream system.

Conclusion

Considering the above, the proposed projects, individually or considered together, would not result in a significant incremental contribution to a cumulative degradation of water quality. Therefore, the incremental contribution of the WHI and WHII projects to the significant cumulative impact would be *less than cumulatively considerable*.

Mitigation Measure(s)

None required.

- 17-10 Cumulative impacts related to substantially altering the existing drainage pattern of the site or area, or creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.**

WHI and WHII

The cumulative geographic setting related to hydrology is the Dry Creek watershed, which drains approximately 101 square miles ranging from west of Auburn (Placer County) to south to Folsom (Sacramento County).¹⁶ Major tributaries to Dry Creek include: Antelope Creek, Secret Ravine, Miners Ravine, Strap Ravine, Linda Creek, and Cirby Creek. Strap Ravine flows from east to west through both the WHI and WHII sites. According to the *Dry Creek Watershed Coordinated Resource Management Plan (DCWCRMP)*, several areas within the Dry Creek watershed have degrading/unstable banks, incising streams, and are experiencing sedimentation of the streambed due, in part, to the modified flow regime caused by increases in impervious surface area that have occurred as a result of development activities in the area.

Per the County's Phase II MS4 permit, projects, such as the WHI and WHII projects, are typically required to demonstrate hydromodification management of stormwater such that post-project runoff is maintained to equal or below pre-project flow rates for the 2-year, 24-hour storm event, generally by way of infiltration, rooftop, and impervious area disconnection, bio-retention, or other LID measures that result in post-project flows that mimic pre-project conditions. However, the Dry Creek Watershed Flood Control Plan notes that the use of local detention basins to limit peak runoff has the potential to result in higher overall peak flows within Dry Creek.¹⁷ Specifically, detaining flows in the lower portion of the Dry Creek watershed, within which the project sites are located, could delay the time when the peak flow occurs such that the peak flow would coincide with the arrival of peak flows from the upper portion of the watershed. Therefore, development of the proposed projects, in conjunction with other projects, could result in significant cumulative impacts related to drainage and stormwater runoff.

¹⁶ Placer and Sacramento Counties. *Dry Creek Watershed Coordinated Resource Management Plan*. December 31, 2003.

¹⁷ Placer County Flood Control and Water Conservation District. *Update to the Dry Creek Watershed Flood Control Plan* [pg. 66]. November 2011.

As a means of minimizing impacts to Dry Creek occurring as a result of cumulative development in the area, the Dry Creek Watershed Drainage Improvement Zone Ordinance (Article 15.32 of the Placer County Code) establishes a drainage improvement zone for the Dry Creek watershed. Mitigation fees are required for new development, and the expansion of existing development, within portions of the Dry Creek watershed that impose a burden on the creeks and drainage infrastructure within the watershed by adding additional impervious surface and accelerating runoff, thereby increasing discharge rates. The proposed projects, as well as other cumulative development in the Dry Creek watershed, would be required to comply with Placer County's Dry Creek Watershed Drainage Improvement Ordinance. Payment of such fees would help to fund future drainage facility improvement projects within the Dry Creek watershed.

As noted in Chapter 10, Hydrology and Water Quality, of this EIR, increases in peak runoff during the two-year, 10-year, 25-year, and 100-year return frequency storm events associated with buildout of the WHI and WHII projects would be relatively minimal (less than 0.25 percent). Therefore, the project's contribution to cumulative increases in flows within the Dry Creek watershed would be relatively limited. In addition, as noted above, the proposed projects would be subject to payment of fees to fund future drainage improvement projects within the watershed. The fees include a one-time fee that is paid prior to building permit issuance and an annual fee that is included in the parcel's property tax. As such, the incremental contribution to cumulative drainage and runoff impacts resulting from the proposed projects would be considered *less than cumulatively considerable*.

Mitigation Measure(s)

None required.

Land Use and Planning/Population and Housing

17-11 Cumulative land use and planning incompatibilities. Based on the analysis below, the cumulative impact is *less than significant*.

WHI and WHII

The geographic context for the cumulative analysis of land use compatibility impacts is the Granite Bay Community Plan area. Cumulative development within the GBCP area, including the proposed projects, would result in increased residential development intensity near rural residential and open space areas. The proposed and completed projects, along with reasonably foreseeable projects within the GBCP area, would change the intensity of land uses within the geographic area that would be affected by the proposed projects. As stated previously, both the WHI and WHII projects would require GBCP Amendments to change the land use designations of the project sites to Low Density Residential (0.4 – 0.9 Ac. minimum) and to Open Space. In addition, both projects would require rezones.

As discussed in Chapter 11, Land Use and Planning/Population and Housing of this EIR, the areas surrounding the WHI and WHII sites consist predominantly of residential development with varying parcel sizes and undeveloped land. The single-story building heights and overall density of the proposed projects would be generally compatible with adjacent neighborhoods. Furthermore, as shown in Table 11-5 of the Land Use and Agricultural Resources chapter of this EIR, the proposed projects would be generally consistent with relevant policies in the Placer County General Plan and the GBCP.

Similar to the proposed projects, all future development within the GBCP area would be required to conform to the guidelines and policies contained in the Placer County Code, the Placer County General Plan, the GBCP, and the Placer County Design Guidelines documents, which would reduce or avoid land use compatibility conflicts. Furthermore, none of the planned projects within Granite Bay would contribute to localized land use compatibility conflicts within the project vicinity. Therefore, a significant adverse cumulative effect with regard to land use compatibility associated with implementation of past, present, and reasonably foreseeable future projects, as well as the proposed projects, would not occur, and the cumulative impact would be *less than significant*.

Mitigation Measure(s)

None required.

17-12 Cumulative population growth. Based on the analysis below, the cumulative impact is less than significant.

WHI and WHII

Buildout of the GBCP was anticipated to result in population growth within the plan area through the buildout of urban and rural developments throughout the GBCP area, including the project site. As discussed in Impact 11-4, of Chapter 11, Land Use and Planning/Population and Housing, within this EIR, the WHI and WHII projects would house an estimated 66 and 150 persons, respectively. Accounting for existing population and housing data from the 2010 U.S. Census, combined with population growth from new housing units developed since 2010 and units currently under construction, the GBCP area currently has a population of approximately 21,818. Based upon data provided by Placer County, future development of vacant lots in existing and proposed, but yet unbuilt subdivisions, as well as future senior housing units, would result in a total population of 23,696. Therefore, the total estimated population from the WHI and WHII projects, together with population estimates from existing and planned development within Granite Bay, would be 23,912.

Granite Bay Community Plan Population Projections

Table 2.2.1 of the Population and Housing chapter of the GBCP provides the Land Use Policy Map maximum potential buildout for the GBCP area.¹⁸ Based on the then-current

¹⁸ Placer County. *Granite Bay Community Plan, Population and Housing* [p. 18]. Adopted February 28, 2012.

Land Use Designations and acreages of all properties (developed and undeveloped), there is a potential of 10,493 housing units in the Plan area. Utilizing the then-current household size of 2.75 persons per household (2010 Census), the Land Use Plan has an ultimate population holding capacity of 28,855 persons. It is noted in the GBCP, however, that because many areas of Granite Bay have been developed at less than permitted density, the population of Granite Bay is not anticipated to reach the 28,855 level unless land use changes are made in the future. Therefore, a population of 26,000 at buildout is a reasonable assumption and is likely a high estimate.

The GBCP continues by noting that, in Granite Bay, there are several known constraints that will limit future development and population growth. Therefore, past growth rates cannot be projected to estimate a future Granite Bay population. For the purpose of the GBCP update, the maximum potential buildout was determined using capacity analysis (with no specific buildout timeframe) based on the GBCP's current zoning at the time.

Two scenarios were provided in the GBCP to predict the year 2035 population of the Plan area. GBCP Assumption No.1 that states Granite Bay will “continue to grow at a low or moderate rate.” The first “low-growth” scenario projects that one-third of unbuilt housing units permitted by current land use designations and zoning are constructed by 2035. The second assumes a “moderate” development rate with two-thirds of the housing units constructed.

Granite Bay's resident population is expected to grow from 20,825 in 2010 to 22,055 in 2035 in the low projection, and 23,288 in the high projection. This is a corresponding growth rate of 5.9 or 11.8 percent increase in population over the 25-year period.

It should be noted that Plan capacity or buildout is an imprecise estimate and depends on specific assumptions about future density and pace of development and household size, which may be more, or less, than actually occurs. These population projections should be looked at as an estimate of future population growth in Granite Bay.

Summary

The GBCP includes three population estimates based upon full buildout of the Land Use Map, without regard to time: a theoretical maximum population holding capacity of 28,855; a high estimate of 26,000 at buildout of the Land Use Map; and an estimate of 24,521 based on GBCP zoning (i.e., units that could be built on undeveloped or underdeveloped parcels under current zoning designations).

Two more population estimates are provided for Year 2035: a “low-growth” estimate of 22,055, and a “moderate” estimate of 23,288.¹⁹ The low-growth estimate assumes one-third of unbuilt housing units permitted by current land use designations and zoning are built by 2035. The moderate-growth estimate assumes two-thirds of the housing units are constructed.

¹⁹ Placer County. *Granite Bay Community Plan, Population and Housing* [Table 2.2.2]. Adopted February 28, 2012.

It is important to note that concerns were expressed during the public comment period, centered around the perception that the GBCP includes a population cap; and the Whitehawk projects, combined with other GBCP existing and proposed development to date, may exceed the cap. None of the population estimates in the GBCP should be considered a cap (i.e., a maximum population beyond which no development can cause exceedance). Rather, the population figures are provided as estimated projections, which is evident by the use of the terms “estimate” and “projections” in all cases. As stated on page 19 of the Population and Housing Chapter of the GBCP:

It should be noted that Plan capacity or build-out is an imprecise estimate and depends on specific assumptions about future density and pace of development and household size, which may be more, or less, than actually occurs. These population projections should be looked at as an estimate of future population growth in Granite Bay.

WHI and WHII Population Plus Granite Bay Community Plan Population

The WHI and WHII projects would only add an estimated 216 people to the community of Granite Bay, or approximately a one percent (1%) increase over the current population. Considering the existing constraints within both project sites, buildout of the project sites pursuant to existing zoning designations would result in 47 estimated future residents. Thus, the proposed projects would result in an increase in population from what could currently occur on the sites per the existing zoning designations by an estimated 169 residents. As discussed above, the Whitehawk population, combined with proposed/pending projects, is estimated to yield a population of 23,696. While this estimate exceeds the Year 2035 estimates in the GBCP, it does not exceed the population projections provided in the GBCP for buildout based upon land use designations and zoning, which range from 24,521 to 28,885. Thus, buildout of the proposed projects in combination with other approved and proposed developments within the project area would not result in a significant cumulative contribution to population growth within Granite Bay.

It should be noted that population growth itself does not constitute a significant physical environmental effect. Rather, the determination of significance is based on whether population growth could result in indirect physical environmental impacts from associated development. As such, the cumulative analysis within this chapter evaluates the physical environmental impacts of cumulative development in each of the resource discussions included herein.

Considering the above, implementation of the proposed projects, in combination with future development occurring under buildout of the GBCP, would result in a *less-than-significant* cumulative impact related to population growth.

Mitigation Measure(s)

None required.

Noise

17-13 Result in exposure of persons to or generation of traffic noise levels in excess of standards established in the local General Plan, Community Plan or noise ordinance, or applicable standards of other agencies, or a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project under the Cumulative Plus Project Condition. Based on the analysis below, the projects’ incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

The primary source of noise associated with the proposed residential developments would be traffic noise associated with traffic on local roadways. It should be noted that CEQA does not require an analysis of the environment’s impact on the project; however, impacts to future residents at the WHI and WHII projects due to cumulative traffic noise along local roadways is evaluated for the purposes of considering the projects’ consistency with policies in the County’s General Plan and the GBCP.

As discussed in Chapter 12, Noise, of this EIR, the Placer County General Plan Noise Element applies 60 dB L_{dn}/CNEL exterior and 45 dB L_{dn}/CNEL interior noise level standards at the property lines of residential uses affected by transportation noise sources. The County may conditionally allow exterior noise levels between 60 and 65 dB L_{dn} for residential uses, provided that practical noise reduction measures have been implemented and interior noise levels remain in compliance with the 45 dB L_{dn} interior standard. In addition, for the purpose of this analysis, the proposed projects would result in a substantial permanent increase in ambient noise levels above levels existing without the projects if project traffic noise would exceed the Federal Interagency Committee on Noise (FICON) noise level increase thresholds shown in Table 17-13 below.

Table 17-13 Significance of Changes in Cumulative Noise Exposure	
Ambient Noise Level Without Project, L_{dn} dB	Increase Required for Significant Impact
<60	+5.0 dB or more
60-65	+3.0 dB or more
>65	+1.5 dB or more
<i>Source: RCH Group, 2018.</i>	

Traffic noise levels associated with the Cumulative Plus WHI, Cumulative Plus WHII, and Cumulative Plus WHI and WHII conditions are described in the following sections in the context of the aforementioned thresholds. The methodology used to develop such scenarios is discussed in the Transportation and Circulation section of this chapter.

WHI

Future development projects within the GBCP area, including the proposed project, would incrementally affect the future cumulative ambient noise environment. To assess noise

impacts due to project-related traffic increases on the existing local roadway network, noise levels have been calculated for the Cumulative Plus Project Condition.

As shown in Table 17-14 below, most noise sensitive receptors located along roadways in the project vicinity are currently exposed to exterior traffic noise levels that exceed the County's 60 decibel (dB) day-night average (L_{dn}) General Plan exterior noise level standard for residential uses. Such receptors would continue to experience exterior noise levels that exceed the County exterior noise level standards under the Cumulative Plus WHI condition. However, the proposed project's contribution to traffic noise increases would be primarily less than 1 dB L_{dn} , which is the threshold at which noise level increases are perceptible to the human ear. In addition, all project-related traffic noise increases would be below the applicable FICON threshold for substantial noise level increases (see Table 17-13).

The WHI project would not cause any new exceedances of the County's 60 dB L_{dn} threshold at any of the study roadway segments. Therefore, traffic generated by the WHI project would not result in a significant increase in traffic noise levels under Cumulative Plus WHI conditions. Thus, the WHI project's contribution to cumulative traffic noise impacts would be less than cumulatively considerable. Furthermore, average traffic noise at the future property lines of proposed WHI residences closest to Douglas Boulevard (along segment 3w) would be approximately 57.8 dB L_{dn} , which is below the County's 60 dB L_{dn} threshold.

WHII

Similar to WHI, the WHII project's contribution to traffic noise increases would be 0.1 dB or less for all roadway segments (see Table 17-15), which is below the applicable substantial increase thresholds shown in Table 17-13. The WHII project would not cause new exceedances of the County's 60 dB L_{dn} exterior noise level threshold at any of the study roadway segments. Thus, the WHII project's contribution to the cumulative traffic noise impacts would be less than cumulatively considerable.

In addition, average traffic noise at the future property lines of the proposed WHII residences closest to Douglas Boulevard (along segment 4w) would be approximately 57.3 dB L_{dn} , which is below the County's 60 dB L_{dn} threshold.

WHI and WHII

As shown in Table 17-16, the proposed projects' contributions to traffic noise increases would be 0.1 dB or less for all roadway segments, which is below the applicable substantial increase thresholds shown in Table 17-13. Combined, the projects would not cause new exceedances of the County's 60 dB L_{dn} exterior noise level threshold at any of the study roadway segments. Thus, the proposed projects' contribution to the cumulative traffic noise impacts would be less than cumulatively considerable.

**Table 17-14
 Traffic Noise Levels – Cumulative Plus WHI Conditions**

ID #	Roadway	Segment	Distance to Receiver (feet)	Noise Level (dB, L _{dn})		
				Cumulative	Cumulative Plus WHI	Change
1	Douglas Blvd.	Sierra College Blvd. to Cavitt Stallman Rd.	722	64.3	64.3	0.0
2	Douglas Blvd.	Cavitt Stallman Rd. to Woodgrove Way	121	74.0	74.0	0.0
3	Douglas Blvd.	Woodgrove Way to Seeno Ave. (near WHI and WHII)	59	75.2	75.2	0.0
3w	Douglas Blvd.		322	57.8	57.8	0.0
4	Douglas Blvd.	Seeno Ave. to Barton Rd. (near WHII)	95	73.2	73.2	0.0
4w	Douglas Blvd.		344	57.3	57.3	0.0
5	Douglas Blvd.	Barton Rd. to Auburn Folsom Rd.	92	73.9	74.0	+0.1
6	Sierra College Blvd.	North of Douglas Blvd.	128	69.8	69.8	0.0
7	Sierra College Blvd.	Douglas Blvd. to Renaissance Creek/Granite Bay Business Park	157	69.9	69.9	0.0
8	Sierra College Blvd.	Renaissance Creek/Granite Bay Business Park to Eureka Rd.	108	71.2	71.2	0.0
9	Auburn-Folsom Rd.	Douglas Blvd. to Eureka Rd.	82	73.0	73.0	0.0

Source: RCH Group, 2018.

**Table 17-15
 Traffic Noise Levels – Cumulative Plus WHII Conditions**

ID #	Roadway	Segment	Distance to Receiver (feet)	Noise Level (dB, L _{dn})		
				Cumulative	Cumulative Plus WHII	Change
1	Douglas Blvd.	Sierra College Blvd. to Cavitt Stallman Rd.	722	64.3	64.3	0.0
2	Douglas Blvd.	Cavitt Stallman Rd. to Woodgrove Way	121	74.0	74.0	0.0
3	Douglas Blvd.	Woodgrove Way to Seeno Ave. (near WHI and WHII)	59	75.2	75.2	0.0
3w	Douglas Blvd.		322	57.8	57.8	0.0
4	Douglas Blvd.	Seeno Ave. to Barton Rd. (near WHII)	95	73.2	73.2	0.0
4w	Douglas Blvd.		344	57.3	57.3	0.0
5	Douglas Blvd.	Barton Rd. to Auburn Folsom Rd.	92	73.9	74.0	+0.1
6	Sierra College Blvd.	North of Douglas Blvd.	128	69.8	69.8	0.0
7	Sierra College Blvd.	Douglas Blvd. to Renaissance Creek/Granite Bay Business Park	157	69.9	69.9	0.0
8	Sierra College Blvd.	Renaissance Creek/Granite Bay Business Park to Eureka Rd.	108	71.2	71.2	0.0
9	Auburn-Folsom Rd.	Douglas Blvd. to Eureka Rd.	82	73.0	73.0	0.0

Source: RCH Group, 2018.

**Table 17-16
 Traffic Noise Levels – Cumulative Plus WHI and WHII Conditions**

ID #	Roadway	Segment	Distance to Receiver (feet)	Noise Level (dB, L _{dn})		
				Cumulative	Cumulative Plus WHI and WHII	Change
1	Douglas Blvd.	Sierra College Blvd. to Cavitt Stallman Rd.	722	64.3	64.4	+0.1
2	Douglas Blvd.	Cavitt Stallman Rd. to Woodgrove Way	121	74.0	74.1	+0.1
3	Douglas Blvd.	Woodgrove Way to Seeno Ave. (near WHI and WHII)	59	75.2	75.3	+0.1
3w	Douglas Blvd.		322	57.8	57.8	0.0
4	Douglas Blvd.	Seeno Ave. to Barton Rd. (near WHII)	95	73.2	73.2	0.0
4w	Douglas Blvd.		344	57.3	57.3	0.0
5	Douglas Blvd.	Barton Rd. to Auburn Folsom Rd.	92	73.9	74.0	+0.1
6	Sierra College Blvd.	North of Douglas Blvd.	128	69.8	69.8	0.0
7	Sierra College Blvd.	Douglas Blvd. to Renaissance Creek/Granite Bay Business Park	157	69.9	70.0	+0.1
8	Sierra College Blvd.	Renaissance Creek/Granite Bay Business Park to Eureka Rd.	108	71.2	71.2	0.0
9	Auburn-Folsom Rd.	Douglas Blvd. to Eureka Rd.	82	73.0	73.0	0.0

Source: RCH Group, 2018.

In addition, traffic noise at the future property lines of the proposed WHI and WHII residences closest to Douglas Boulevard would be approximately 57.8 dB L_{dn} and 57.3 dB L_{dn}, respectively, which is below the County's 60 dB L_{dn} threshold.

Conclusion

The addition of project traffic under Cumulative Plus WHI, Cumulative Plus WHII, and Cumulative Plus WHI and WHII conditions would increase traffic noise on roadway segments already experiencing relatively high traffic noise levels. However, the WHI and WHII projects would not result in any individual or combined substantial increases in traffic noise on area roadways and would not cause new exceedances of the County's 60 dB L_{dn} exterior noise level threshold for residential uses under cumulative conditions. In addition, average noise levels at the proposed WHI and WHII residences would comply with the 60 dB L_{dn} exterior noise level threshold under cumulative conditions.

Per the Transportation Noise Assessment, typical residential construction consistent with the Uniform Building Code (UBC) provides an exterior-to interior noise level reduction of approximately 25 dB provided that exterior windows and doors are closed. Thus, residences exposed to exterior noise levels of 70 dB L_{dn} or less would comply with the County's interior noise level standard of 45 dB L_{dn}. Given that none of the proposed residences would be exposed to noise levels in excess of 70 dB L_{dn}, cumulative interior noise levels at the WHI and WHII projects would comply with County standards.

Based on the above, the proposed projects' incremental contribution to significant cumulative impacts related to traffic noise levels would be *less than cumulatively considerable*.

Mitigation Measure(s)

None required.

Public Services and Recreation

17-14 Cumulative impacts to public services. Based on the analysis below, the cumulative impact is *less than significant*.

Potential cumulative impacts related to fire and sheriff protection services, schools, public services and government facilities, and parks and recreation are discussed below.

WHI and WHII

Fire Protection Services

As discussed in Chapter 13, Public Services and Recreation, of this EIR, the response times to the proposed projects would be consistent with General Plan Policy 4.4.2. Both projects would be subject to payment of a Fire Impact Fee, which is used to fund anticipated capital improvement needs identified in the South Placer Fire Protection District Capital Facilities

Plan Update 2017 (2017 CFP)²⁰. In addition, development within the proposed project sites, as well as other future development throughout Granite Bay, would be required to comply with all applicable regulations imposed by the South Placer Fire Protection District (South Placer FD) and the California Fire Code, as adopted by Section 15.04.510 of the Placer County Code.

With payment of the Fire Impact Fee, the proposed projects, in combination with future development occurring under buildout of the GBCP, would not be anticipated to result in the need for new, or physical improvements to existing, fire protection facilities, construction of which could cause significant environmental impacts, and a less-than-significant cumulative impact related to fire protection services would occur.

Sheriff Protection Services

As discussed in Chapter 13, Public Services and Recreation, of this EIR, Policy 4.H.1 of the Placer County General Plan sets a response time goal of eight minutes for suburban areas such as the Granite Bay community. In addition, Policies 4.H.1 and 4.H.2 of the Placer County General Plan call for a staffing ratio of one officer per 1,000 residents in unincorporated areas and a response time for emergency calls of eight minutes in suburban areas.

Combined, the WHI and WHII projects would include the development of 79 single-family homes, which would not result in a substantial increase in demand for law enforcement services such that new or physically altered law enforcement facilities would be needed to adequately serve the proposed projects. In addition, though response times are dependent upon the location of patrol officers at the time of the emergency call, on average, response times to the project sites would be anticipated to be within the Placer County General Plan's eight-minute response time standard for suburban areas. As a result, the proposed projects would not result in a need for new, or improvements to existing, sheriff protection facilities, construction of which could cause significant environmental impacts. Similar to the WHI and WHII projects, other future development within the region would be required to address impacts related to sheriff protection services on a project-by-project basis. Based on the above, the proposed projects, in combination with future development occurring under buildout of the GBCP, would have a less-than-significant impact to sheriff protection services.

Schools

Cumulative buildout of the GBCP could result in overcrowding at schools in the area. However, each individual development would be required to pay SB 50 school impact fees, similar to the proposed projects, which would contribute to the facilitation of school expansions in order to serve the needs of the area. As discussed in Chapter 13, Public Services and Recreation, of this EIR, the Eureka Union School District (EUSD) has

²⁰ South Placer Fire Protection District. *Capital Facilities Plan Update 2017 and 2015/2016 Fire Fee Annual Report*. Adopted February 21, 2017.

adequate capacity to serve the students that would be generated by both projects and the projects would not contribute a substantial amount number of students to the Roseville Joint Union High School District (RJUHSD), which is currently over capacity. Furthermore, according to SB 50, payment of the necessary school impact fees for the projects would be considered full and satisfactory CEQA mitigation. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any “[...] legislative or adjudicative act [...] involving [...] the planning, use, or development of real property” (Government Code 65996(b)). Therefore, the WHI and WHII projects, in combination with future development occurring under buildout of the GBCP, would result in a less-than-significant cumulative impact related to the need for new, or improvements to existing, school facilities.

Public Facilities and Government Services

As discussed above, while project-generated traffic could result in an incremental increase in maintenance of County roads within Granite Bay, such an increase would be negligible. Similarly, given the size of the proposed developments, any additional demand on libraries or other public facilities and services generated by the WHI and WHII projects would be relatively minor, and is not likely to result in the alteration of existing facilities or the construction of new facilities. The proposed projects, as well as other development in the unincorporated County, would be required by the County to pay Development Impact Fees, which would help to fund and sustain public facilities and services, including public roads, within Granite Bay. The proposed projects, in combination with future development occurring under buildout of the GBCP, would result in a less-than-significant cumulative impact related to such.

Parks and Recreation

The proposed projects would include the provision of on-site parks and would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of such facilities would occur or be accelerated. Per Article 15.34 of the Placer County Code, future development projects within unincorporated Placer County, including the proposed projects, would be required to pay a parks and recreational facility fee. Park and recreation fees in Planned Residential Developments such as WHI and WHII are doubled. The purpose of the park and recreation facilities impact fee is to provide funding for expansion of park land and recreation facilities required to serve new development in unincorporated Placer County, including Granite Bay. Furthermore, the WHI and WHII projects would provide 0.33-acre and 0.87-acre of on-site private parks, respectively, which would exceed the County’s requirement of five acres of park land per 1,000 residents (Section 16.08.100 of the Placer County Code and General Plan Policy 5.A.1). Future development within Granite Bay would similarly be required to comply with the County’s park dedication/in-lieu fee standards. Therefore, the WHI and WHII projects, in combination with future buildout of the GBCP, would result in a less-than-significant cumulative impact related to parks and recreation.

Conclusion

Based on the above, the proposed projects, in combination with future development occurring under buildout of the GBCP, would result in a *less-than-significant* cumulative impact related to public services and recreation.

Mitigation Measure(s)

None required.

Transportation and Circulation

The following section discusses the cumulative transportation and circulation conditions associated with the proposed projects. The information contained within this section is based on the Transportation Impact Study prepared for the proposed projects by Fehr & Peers (see Appendix M),²¹ The Transportation Impact Study includes an analysis of traffic operations under the following cumulative scenarios:

- **Cumulative No Project:** Traffic volumes associated with cumulative (year 2036) buildout of the project region, including reasonably foreseeable land development projects and transportation projects.
- **Cumulative Plus WHI:** Traffic associated with Cumulative No Project conditions plus traffic generated by the WHI project.
- **Cumulative Plus WHII:** Traffic associated with Cumulative No Project conditions plus traffic generated by the WHII project.
- **Cumulative Plus WHI and WHII:** Traffic associated with Cumulative No Project conditions plus traffic generated by both the WHI and WHII projects.

Cumulative Transportation and Circulation Setting

Cumulative traffic volumes for the GBCP area were developed using a 2036 travel forecasting model that was developed for the GBCP Circulation Element Update by Fehr & Peers in 2018 to forecast future traffic volumes in the study area.

The Granite Bay 2036 travel forecasting model is based on SACOG's 2036 SACMET travel forecasting model, which is consistent with the horizon year of SACOG's current 2016 MTP/SCS. Because the Granite Bay travel forecasting model is based on the 2036 SACMET model, the model includes approved and planned development throughout the SACOG region according to development forecasts used in the 2016 MTP/SCS. This includes new land development throughout the Sacramento metropolitan region in accordance with regional population and employment growth projections. Within Granite Bay, the travel forecasting model has additional travel analysis zone (TAZ), roadway network and land use detail than the regional SACMET model upon which it is based. Thus, the Granite Bay travel forecasting model is able to more accurately model travel activity in and around Granite Bay.

²¹ Fehr & Peers. *Final Transportation Impact Study for Whitehawk I & II*. September 2018.

The land development projections and transportation improvements within Granite Bay were further refined by County planning staff to reflect approved, pending, and known projects in Granite Bay, as well as land development potential in Granite Bay based on underlying zoning and the Placer County General Plan land use designations. The list of approved, pending, and known projects in the GBCP area that were applied to the model are listed at the beginning of this chapter.

Cumulative Roadway Improvements

The future changes to the transportation network are primarily based on the SACOG 2016 MTP/SCS Tier 1 project list. The Tier 1 project list is a financially constrained list of funded transportation enhancements and expansions to the roadway, transit, and bicycle and pedestrian facilities in the SACOG region that are expected to occur over the life of the 2016 MTP/SCS (i.e., by 2036). Major roadway improvements identified in the SACOG 2016 MTP/SCS Tier 1 project list for the South Placer County region include the following:

- I-80 improvements including new auxiliary lanes on I-80 eastbound from SR 65 to Rocklin Road and on I-80 westbound from Douglas Boulevard to Riverside Avenue.
- Full construction of the I-80/SR 65 Interchange Improvement project, including widening of all four freeway-to-freeway ramps, new auxiliary lanes on SR 65 northbound and southbound from I-80 to Pleasant Grove Boulevard, and a new HOV-to-HOV direct connector.
- State Route 65 is widened to six continuous lanes and auxiliary lanes in each direction between I-80 and Blue Oaks Boulevard.
- New auxiliary lanes on State Route 65 from Blue Oaks Boulevard to Lincoln Boulevard.
- Placer Parkway Phase 1 is constructed as four lanes from SR 65 to Foothills Boulevard.
- Sierra College Boulevard widened to five lanes from Nightwatch Drive to I-80 in Rocklin.

In addition, the Transportation Impact Study includes the following improvements based on information contained in the SACOG 2016 MTP/SCS Tier 1 project list, the Granite Bay Benefit District of the Placer Countywide Capital Improvement Program (CIP), South Placer Regional Transportation Agency (SPRTA) fee program, and the City of Roseville CIP:

- Douglas Boulevard is widened to six lanes with Class II bike lanes from Sierra College Boulevard to Cavitt Stallman Road South. The third eastbound through lane would extend just beyond the Cavitt Stallman Road South intersection before transition back to two lanes, while the existing third westbound through lane approaching Sierra College Boulevard would be extended easterly to Cavitt Stallman Road South.

- Sierra College Boulevard is widened to six lanes from Sacramento County line to Olympus Drive, including widening the northbound and southbound approaches to three through lanes at the Sierra College Boulevard/Eureka Road study intersection.
- Improvements at the Sierra College Boulevard/Douglas Boulevard intersection, including widening the southbound approach to accommodate a right-turn pocket.
- Improvements at the Barton Road/Douglas Boulevard intersection improvements, including widening the southbound approach to accommodate a left turn pocket and widening the eastbound approach to accommodate a right-turn pocket.

All of the improvements listed above are considered reasonably foreseeable projects because they are included in either a financially constrained projection (i.e., SACOG 2016 MTP/SCS Tier 1 project list) or a funded local capital improvement program or fee program. Figure 17-1 displays the cumulative roadway network within the project area.

Traffic Forecasts

The Granite Bay travel forecasting model was used to forecast Cumulative No Project traffic levels at study roadway segments and intersections with the “difference method”. The difference method involves calculating the difference between future year and base year traffic volumes from the model and adding such volumes to existing traffic volumes at the study intersections to develop future year forecasts. The method corrects any potential anomalies within the model. The forecasting procedure is calculated as follows:

$$\text{Cumulative No Project Forecast} = \text{Existing Traffic Count} + \\ (\text{“Cumulative No Project” Raw Model Volume} - \text{Base Year Raw Model Volume})$$

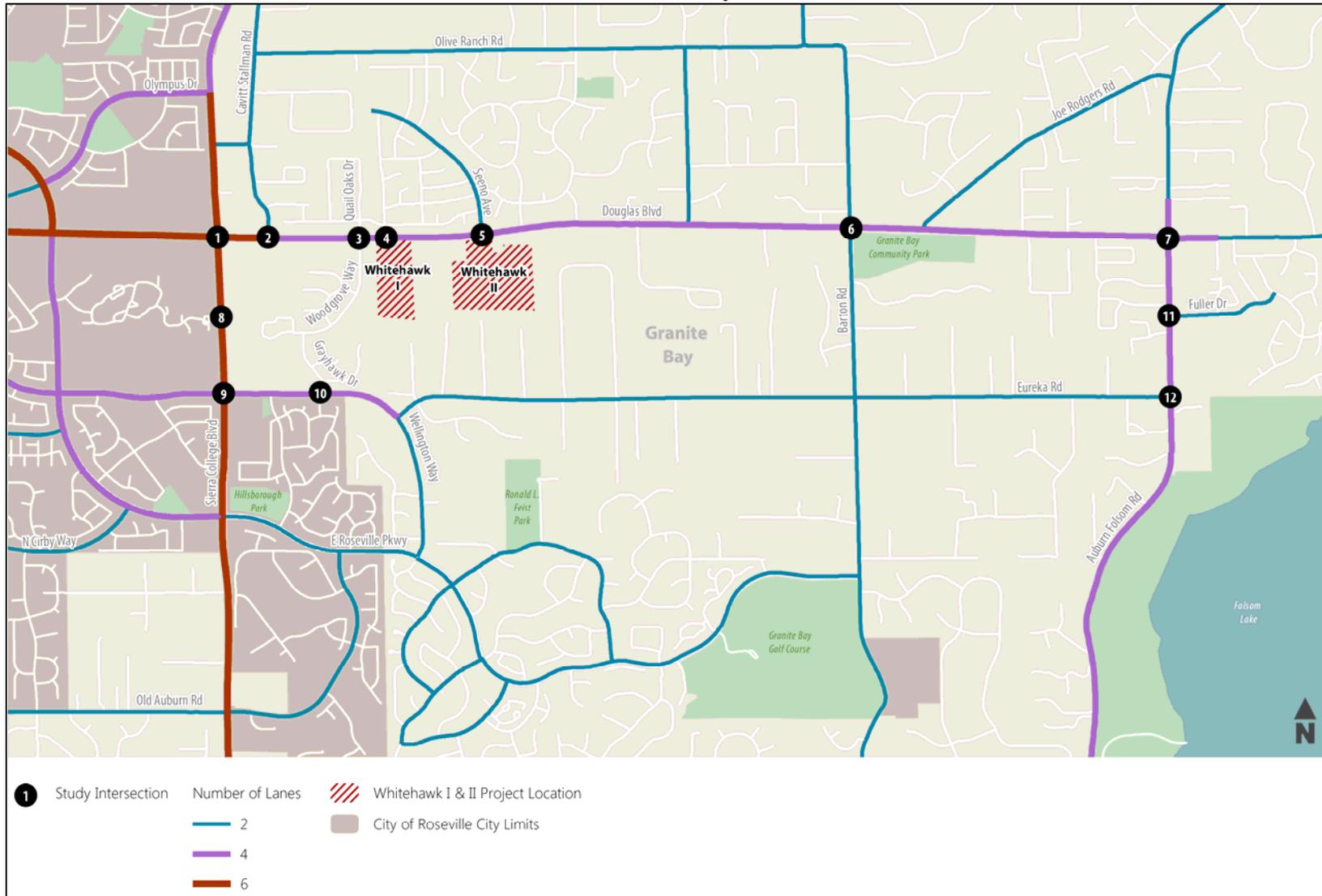
In instances where a roadway does not currently exist, the Cumulative No Project raw model volume is used directly. Figure 17-2 presents the intersection turning lane geometrics, traffic control, and Cumulative No Project AM and PM peak hour traffic forecasts for the 12 study intersections.

In order to develop the Cumulative Plus WHI, Cumulative Plus WHII, and Cumulative Plus WHI and II conditions, vehicle trip generation associated with the WHI and WHII projects was added to the Cumulative No Project condition traffic volumes using the trip distribution and assignment patterns discussed in Chapter 14, Transportation and Circulation, of this EIR.

Douglas Boulevard – Diverted Traffic Evaluation

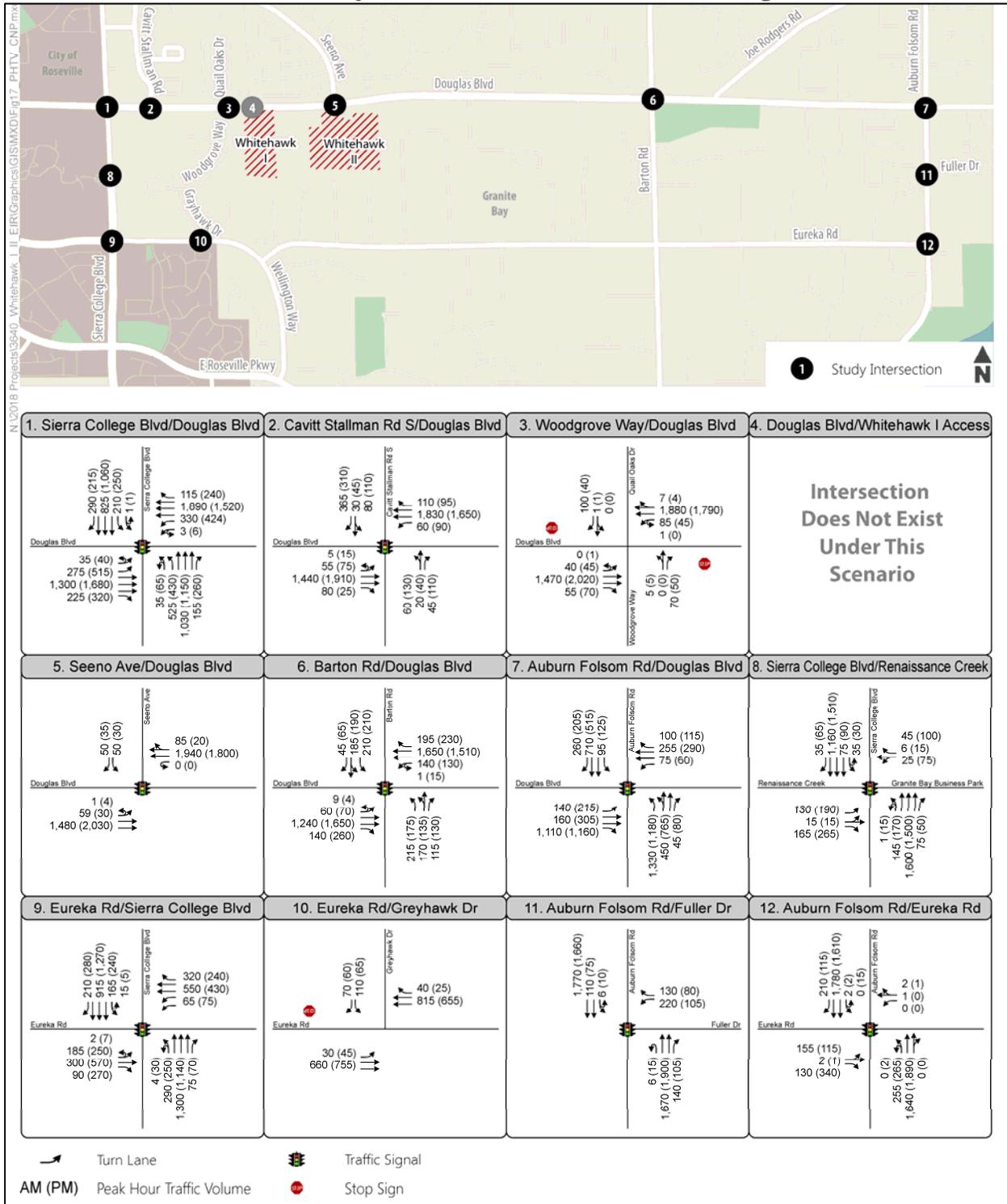
In response to public comments, the Transportation Impact Study included an analysis of travel speeds on Douglas Boulevard between Seeno Avenue and Cavitt Stallman Road South to determine the relative attractiveness for through traffic to divert off Douglas Boulevard and use parallel local roadways such as Rolling Oaks Drive and Wood Thrush Way through the Quail Oaks neighborhood. The Transportation Impact Study concluded that for Cumulative Plus WHI, Cumulative Plus WHII, and Cumulative Plus WHI and WHII conditions, the addition of project traffic would not substantially alter travel times on Douglas Boulevard from Seeno Avenue to Cavitt Stallman Road South during the AM and PM peak hours.

**Figure 17-1
 Cumulative Roadway Network**



Source: Fehr & Peers, 2018.

Figure 17-2
Cumulative No Project Traffic Volumes and Lane Configurations



Source: Fehr & Peers, 2018.

Because the westbound travel speeds would remain unchanged relative to Cumulative No Project conditions for all scenarios (WHI, WHII, WHI and WHII), the proposed projects would not increase the attractiveness for through traffic to divert off Douglas Boulevard through the Quail Oaks neighborhood under cumulative conditions. While the eastbound travel speeds would be reduced under the Cumulative Plus WHII and Cumulative Plus WHI and WHII conditions, due to the additional leg and signal phase at the Seeno Avenue signal, the travel speeds would remain substantially higher than diverting off Douglas Boulevard. Therefore, the proposed projects would not result in any issues related to diverted traffic.

Cumulative Impacts and Mitigation Measures

Cumulative impacts of the proposed projects on the transportation and circulation system are discussed below. Each impact is followed by recommended mitigation measures, if necessary, to reduce the significance of identified impacts. It should be noted that a detailed overview of the applicable level of service (LOS) thresholds for study intersections and roadways is provided in Chapter 14, Transportation and Circulation, of this EIR.

17-15 Study intersections under the Cumulative Plus Project conditions. Based on the analysis below, the findings are as follows:

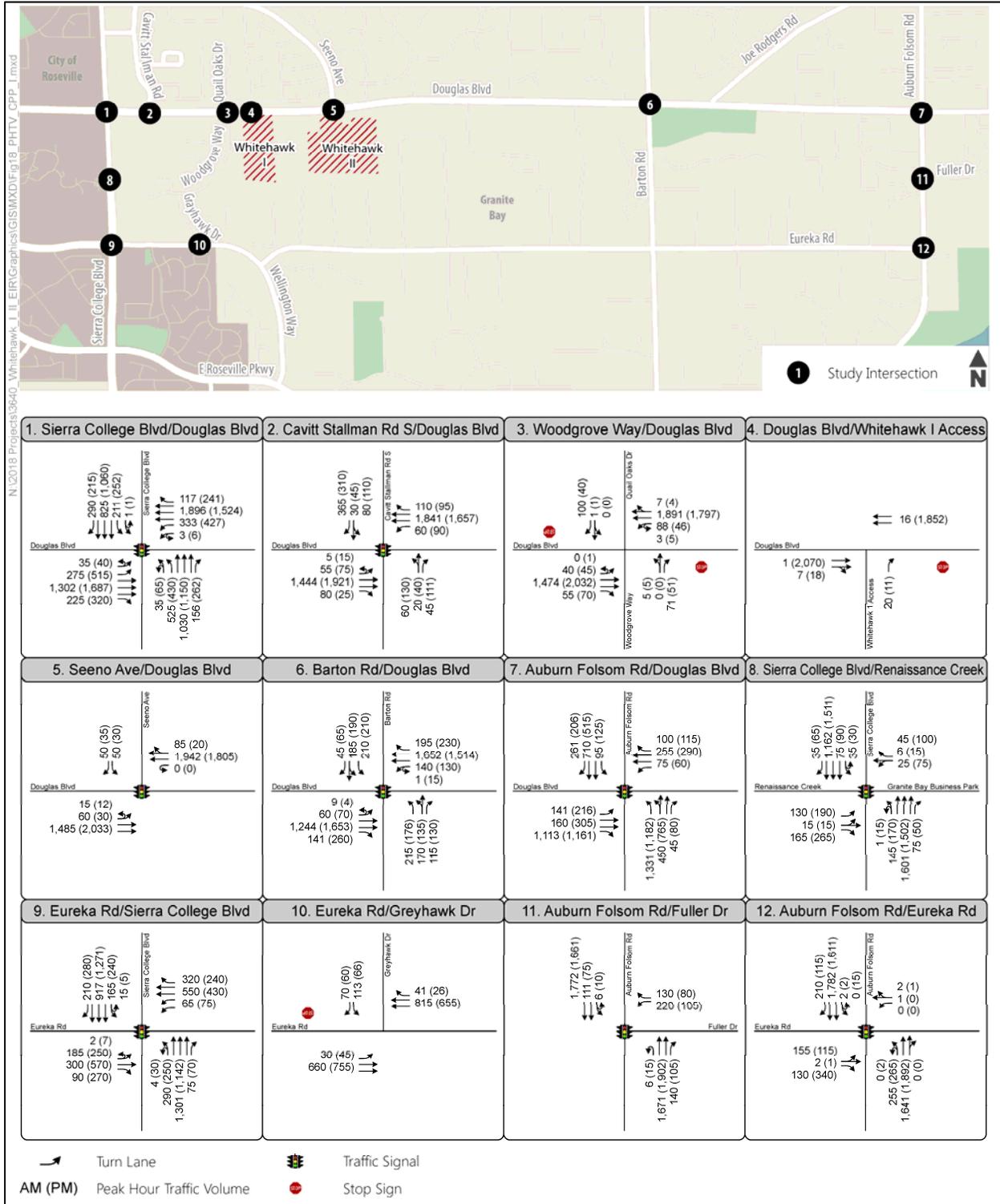
- **Cumulative Plus WHI**. The project's incremental contribution to the significant cumulative impact would be *less than cumulatively considerable* for all study intersections.
- **Cumulative Plus WHII**. The project's incremental contribution to the significant cumulative impact would be *less than cumulatively considerable* for all study intersections.
- **Cumulative Plus WHI and WHII**. The projects' incremental contribution to the significant cumulative impact would be *less than cumulatively considerable*, with the exception of the Woodgrove Way/Quail Oaks Drive/Douglas Boulevard intersection. With mitigation, the projects' incremental contribution to the significant cumulative impact would be *less than cumulatively considerable*.

WHI

Figure 17-3 displays the 2036 Cumulative Plus WHI traffic volumes at each study intersection in both weekday AM and PM peak hours. Table 17-17 presents the average delay and LOS at the study intersections under Cumulative Plus WHI conditions. As shown in the table, all study intersections continue to operate at an acceptable LOS under Cumulative Plus WHI conditions with the exception of the following three intersections, which would operate at an unacceptable LOS:

- Sierra College Boulevard/Douglas Boulevard (Intersection #1) – LOS E during the AM and PM peak hours;
- Woodgrove Way/Quail Oaks Drive/Douglas Boulevard (Intersection #3) – LOS F during the AM and PM peak hours; and

Figure 17-3
Cumulative Plus WHI Traffic Volumes and Lane Configurations



Source: Fehr & Peers, 2018.

**Table 17-17
Study Intersection LOS – Cumulative Plus WHI Conditions**

Intersection	Traffic Control ¹	Peak Hour	Cumulative No Project		Cumulative Plus WHI	
			Delay ²	LOS ³	Delay ²	LOS ³
1. Sierra College Blvd./Douglas Blvd.	Signal	AM	61.2	E	61.6	E
		PM	70.9	E	71.4	E
2. Cavitt Stallman Rd. South/Douglas Blvd.	Signal	AM	14.6	B	14.7	B
		PM	22.4	C	22.5	C
3. Woodgrove Way/Quail Oaks Dr./Douglas Blvd.	SSSC	AM	92.8	F	91.6	F
		PM	316.0	F	305.9	F
4. WHI Access/Douglas Blvd. ⁴	SSSC	AM	--		17.6	C
		PM			23.6	C
5. Seeno Ave./Douglas Blvd.	Signal	AM	7.8	A	6.8	A
		PM	17.2	B	13.3	B
6. Barton Rd./Douglas Blvd.	Signal	AM	32.3	C	32.4	C
		PM	29.8	C	30.0	C
7. Auburn Folsom Rd./Douglas Blvd.	Signal	AM	50.7	D	51.0	D
		PM	46.7	D	46.8	D
8. Sierra College Blvd./Renaissance Creek/Granite Bay Business Park	Signal	AM	26.6	C	26.6	C
		PM	31.4	C	31.4	C
9. Sierra College Blvd./Eureka Rd.	Signal	AM	40.7	D	40.7	D
		PM	43.6	D	43.6	D
10. Grayhawk Dr./Eureka Rd.	SSSC	AM	28.8	D	29.8	D
		PM	15.0	C	15.0	C
11. Auburn Folsom Rd./Fuller Dr.	Signal	AM	17.0	B	17.1	B
		PM	9.4	A	9.4	A
12. Auburn Folsom Rd./Eureka Rd.	Signal	AM	21.2	C	21.3	C
		PM	11.7	B	11.7	B

Notes:

1. Signal = traffic signal-controlled intersection; SSSC = side-street stop-controlled intersection.
2. Average control delay for signalized intersections is the weighted average for all movements. Average control delay at SSSC intersections is the “overall weighted average delay for movements yielding the right-of-way.”
3. LOS is calculated based on methodologies contained in the HCM, 6th Edition.
4. The WHI Access does not exist under Cumulative No Project conditions.

Bold text indicates unacceptable operations.

Source: Fehr & Peers, 2018.

- Sierra College Boulevard/Eureka Road (Intersection #9) – LOS D during the AM and PM peak hours.

The intersections listed above operate at an unacceptable LOS under Cumulative No Project conditions and would continue to operate at an unacceptable LOS under Cumulative Plus WHI conditions. Thus, the WHI project, in combination with cumulative development, would have a significant cumulative impact at the three intersections. However, the vehicle trips generated by the WHI project would not degrade the operations by a service level (i.e., LOS D to LOS E) at the City of Roseville intersections – Sierra College Boulevard/Douglas Boulevard and Sierra College Boulevard/Eureka Road – relative to Cumulative No Project conditions.

Furthermore, the weighted average control delay at Woodgrove Way/Quail Oaks Drive/Douglas Boulevard would decrease during the AM and PM peak hours when compared to Cumulative No Project conditions. Therefore, the WHI project would not conflict with the applicable Placer County and City of Roseville significance thresholds, and the project's incremental contribution to the cumulative impact noted above would be less than cumulatively considerable.

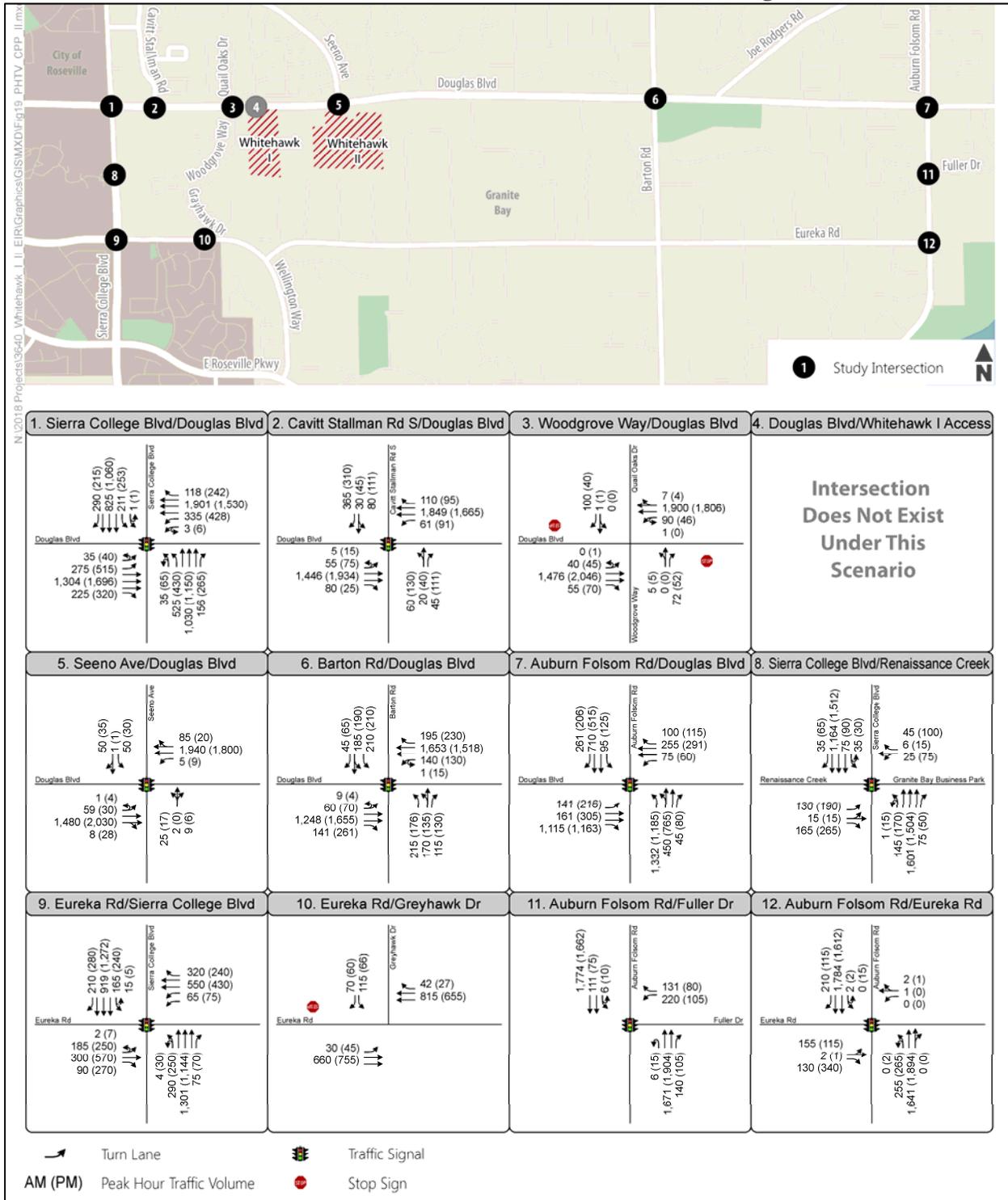
WHII

Figure 17-4 displays the 2036 Cumulative Plus WHII traffic volumes at each study intersection in both weekday AM and PM peak hours. Table 17-18 presents the average delay and LOS at the study intersections under Cumulative Plus WHII conditions. As shown in the table, all study intersections continue to operate at an acceptable LOS under Cumulative Plus WHII conditions with the exception of the following three intersections, which would operate at an unacceptable LOS:

- Sierra College Boulevard/Douglas Boulevard (Intersection #1) – LOS E during the AM and PM peak hours;
- Woodgrove Way/Quail Oaks Drive/Douglas Boulevard (Intersection #3) – LOS F during the AM and PM peak hours; and
- Sierra College Boulevard/Eureka Road (Intersection #9) – LOS D during the AM and PM peak hours.

The intersections listed above operate at an unacceptable LOS under Cumulative No Project conditions and would continue to operate at an unacceptable LOS under Cumulative Plus WHII conditions. Thus, the WHII project, in combination with cumulative development, would have a significant cumulative impact at the three intersections. However, the vehicle trips generated by the WHII project would not degrade the operations by a service level (i.e., LOS D to LOS E) at the City of Roseville intersections – Sierra College Boulevard/Douglas Boulevard and Sierra College Boulevard/Eureka Road – relative to Cumulative No Project conditions.

**Figure 17-4
 Cumulative Plus WHII Traffic Volumes and Lane Configurations**



Source: Fehr & Peers, 2018.

**Table 17-18
Study Intersection LOS – Cumulative Plus WHI Conditions**

Intersection	Traffic Control ¹	Peak Hour	Cumulative No Project		Cumulative Plus WHI	
			Delay ²	LOS ³	Delay ²	LOS ³
1. Sierra College Blvd./Douglas Blvd.	Signal	AM	61.2	E	61.9	E
		PM	70.9	E	71.9	E
2. Cavitt Stallman Rd. South/Douglas Blvd.	Signal	AM	14.6	B	14.8	B
		PM	22.4	C	22.6	C
3. Woodgrove Way/Quail Oaks Dr./Douglas Blvd.	SSSC	AM	92.8	F	91.5	F
		PM	316.0	F	311.9	F
4. WHI Access/Douglas Blvd. ⁴	SSSC	AM	--			
		PM	--			
5. Seeno Ave./Douglas Blvd.	Signal	AM	7.8	A	13.5	B
		PM	17.2	B	19.4	B
6. Barton Rd./Douglas Blvd.	Signal	AM	32.3	C	32.5	C
		PM	29.8	C	30.1	C
7. Auburn Folsom Rd./Douglas Blvd.	Signal	AM	50.7	D	51.0	D
		PM	46.7	D	46.9	D
8. Sierra College Blvd./Renaissance Creek/Granite Bay Business Park	Signal	AM	26.6	C	26.3	C
		PM	31.4	C	31.4	C
9. Sierra College Blvd./Eureka Rd.	Signal	AM	40.7	D	40.7	D
		PM	43.6	D	43.6	D
10. Grayhawk Dr./Eureka Rd.	SSSC	AM	28.8	D	30.4	C
		PM	15.0	C	15.0	C
11. Auburn Folsom Rd./Fuller Dr.	Signal	AM	17.0	B	17.1	B
		PM	9.4	A	9.4	A
12. Auburn Folsom Rd./Eureka Rd.	Signal	AM	21.2	C	21.4	C
		PM	11.7	B	11.7	B

Notes:

1. Signal = traffic signal-controlled intersection; SSSC = side-street stop-controlled intersection.
2. Average control delay for signalized intersections is the weighted average for all movements. Average control delay at SSSC intersections is the “overall weighted average delay for movements yielding the right-of-way.”
3. LOS is calculated based on methodologies contained in the HCM, 6th Edition.
4. The WHI Access does not exist under Cumulative No Project or conditions.

Bold text indicates unacceptable operations.

Source: Fehr & Peers, 2018.

Furthermore, the weighted average control delay at Woodgrove Way/Quail Oaks Drive/Douglas Boulevard would decrease during the AM and PM peak hours when compared to Cumulative No Project conditions. Therefore, the WHII project would not conflict with the applicable Placer County and City of Roseville significance thresholds, and the project's incremental contribution to the cumulative impacts noted above would be less than cumulatively considerable.

WHI and WHII

Figure 17-5 displays the 2036 Cumulative Plus WHI and WHII traffic volumes at each study intersection in both weekday AM and PM peak hours. Table 17-19 presents the average delay and LOS at the study intersections under Cumulative Plus WHI and WHII conditions.

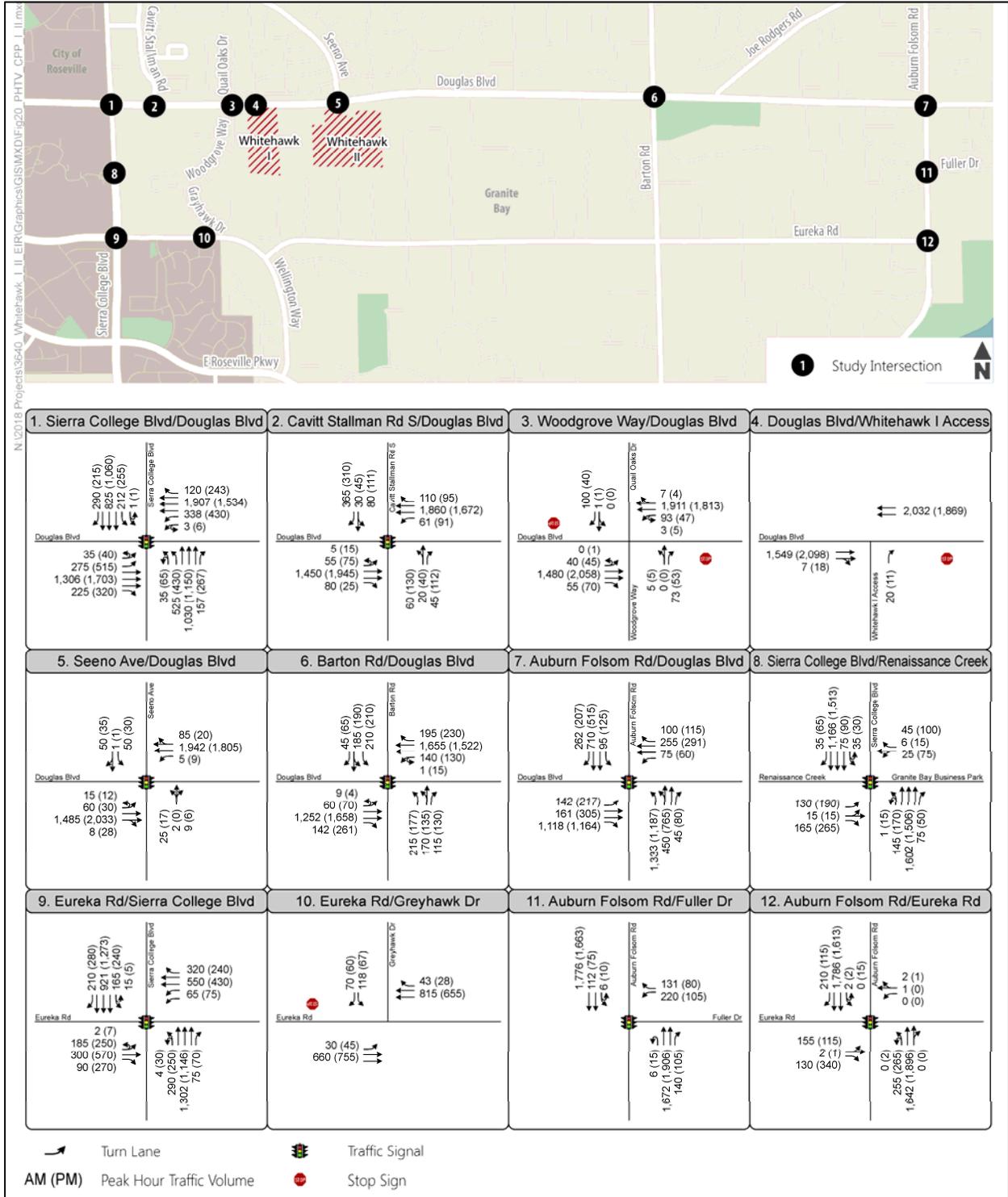
As shown in the table, all study intersections continue to operate at an acceptable LOS under Cumulative Plus WHI and WHII conditions with the exception of the following three intersections, which would operate at an unacceptable LOS:

- Sierra College Boulevard/Douglas Boulevard (Intersection #1) – LOS E during the AM and PM peak hours;
- Woodgrove Way/Quail Oaks Drive/Douglas Boulevard (Intersection #3) – LOS F during the AM and PM peak hours; and
- Sierra College Boulevard/Eureka Road (Intersection #9) – LOS E during the AM and PM peak hours.

The intersections listed above operate at an unacceptable LOS under Cumulative No Project conditions and would continue to operate at an unacceptable LOS under Cumulative Plus WHI and WHII conditions. Thus, the proposed projects, in combination with cumulative development, would have a significant cumulative impact at the three intersections. However, the combined vehicle trips generated by the WHI and WHII projects would not degrade the operations by a service level (i.e., LOS D to LOS E) at the City of Roseville intersections – Sierra College Boulevard/Douglas Boulevard and Sierra College Boulevard/Eureka Road – relative to Cumulative No Project conditions.

While the weighted average control delay at Woodgrove Way/Quail Oaks Drive/Douglas Boulevard would decrease during the PM peak hour when compared to Cumulative No Project conditions, average delay would increase by approximately 61.6 seconds during the AM peak hour with the addition of traffic from the proposed projects. Therefore, combined development of the WHI and WHII projects would conflict with the applicable Placer County and City of Roseville significance thresholds at the Woodgrove Way/Quail Oaks Drive/Douglas Boulevard intersection during the AM peak hour, and the projects' incremental contribution to the cumulative impact at the intersection would be cumulatively considerable.

**Figure 17-5
 Cumulative Plus WHI and WHII Traffic Volumes and Lane Configurations**



Source: Fehr & Peers, 2018.

Table 17-19						
Study Intersection LOS – Cumulative Plus WHI and WHII Conditions						
Intersection	Traffic Control ¹	Peak Hour	Cumulative No Project		Cumulative Plus WHI and WHII	
			Delay ²	LOS ³	Delay ²	LOS ³
1. Sierra College Blvd./Douglas Blvd.	Signal	AM	61.2	E	62.5	E
		PM	70.9	E	72.3	E
2. Cavitt Stallman Rd. South/Douglas Blvd.	Signal	AM	14.6	B	14.9	B
		PM	22.4	C	22.6	C
3. Woodgrove Way/Quail Oaks Dr./Douglas Blvd.	SSSC	AM	92.8	F	154.4	F
		PM	316.0	F	302.2	F
4. WHI Access/Douglas Blvd. ⁴	SSSC	AM	--		17.7	C
		PM	--		24.2	C
5. Seeno Ave./Douglas Blvd.	Signal	AM	7.8	A	13.7	B
		PM	17.2	B	19.7	B
6. Barton Rd./Douglas Blvd.	Signal	AM	32.3	C	32.6	C
		PM	29.8	C	30.3	C
7. Auburn Folsom Rd./Douglas Blvd.	Signal	AM	50.7	D	51.3	D
		PM	46.7	D	47.0	D
8. Sierra College Blvd./Renaissance Creek/Granite Bay Business Park	Signal	AM	26.6	C	26.6	C
		PM	31.4	C	31.5	C
9. Sierra College Blvd./Eureka Rd.	Signal	AM	40.7	D	40.7	D
		PM	43.6	D	43.6	D
10. Grayhawk Dr./Eureka Rd.	SSSC	AM	28.8	D	31.4	C
		PM	15.0	C	15.1	C
11. Auburn Folsom Rd./Fuller Dr.	Signal	AM	17.0	B	17.2	B
		PM	9.4	A	9.4	A
12. Auburn Folsom Rd./Eureka Rd.	Signal	AM	21.2	C	21.4	C
		PM	11.7	B	11.8	B

Notes:

1. Signal = traffic signal-controlled intersection; SSSC = side-street stop-controlled intersection.
2. Average control delay for signalized intersections is the weighted average for all movements. Average control delay at SSSC intersections is the “overall weighted average delay for movements yielding the right-of-way.”
3. LOS is calculated based on methodologies contained in the HCM, 6th Edition.
4. The WHI Access does not exist under Cumulative No Project conditions.

Bold text indicates unacceptable operations. **Bold and highlighted text** indicates significant impacts.

Source: Fehr & Peers, 2018.

Conclusion

Based on the above, under Cumulative Plus WHI and Cumulative Plus WHII conditions, the proposed projects would not result in any individual conflicts with applicable Placer County and City of Roseville significance thresholds. However, under Cumulative Plus WHI and WHII conditions, the projects' incremental contribution to the cumulative impact at the Woodgrove Way/Quail Oaks Drive/Douglas Boulevard would be *cumulatively considerable*.

Mitigation Measure(s)

Existing Plus WHI: None required.

Existing Plus WHII: None required.

Existing Plus WHI and WHII: Implement Mitigation Measure 17-15.

Implementation of the following mitigation measure would eliminate the northbound and southbound left-turn and through movements at the Woodgrove Way/Quail Oaks Drive/Douglas Boulevard intersection, which would limit access to left-in and right-in/right-out movements only. As noted in Chapter 14, Transportation and Circulation, of this EIR, the relatively low volume using the turn movements that would be displaced with implementation of the mitigation measure is an indication that alternative routes are available today for drivers that may want to use them, but currently avoid them due to high delay. Consequently, implementation of traffic signal control as a mitigation, although warranted, is not appropriate given the low volume using the intersection movements.

With implementation of the mitigation measure, the Woodgrove Way/Quail Oaks Drive/Douglas Boulevard intersection would operate acceptably at LOS C during the AM peak hour. Therefore, the impact to the Woodgrove Way/Quail Oaks Drive/Douglas Boulevard intersection would be reduced to a *less than cumulatively considerable* level.

17-15 *Implement Mitigation Measure 14-2.*

17-16 Study roadway segments under Cumulative Plus Project conditions. Based on the analysis below, the findings are as follows:

- **Cumulative Plus WHI.** The project's incremental contribution to the significant cumulative impact would be *less than cumulatively considerable* for all roadway segments.
- **Cumulative Plus WHII.** The project's incremental contribution to the significant cumulative impact would be *less than cumulatively considerable*, with the exception of Sierra College Boulevard from Douglas Boulevard to Renaissance Creek and Douglas Boulevard from Woodgrove Way/Quail Oaks Drive to Seeno Avenue. Even with mitigation, the project's incremental contribution to the significant cumulative impact would be *cumulatively considerable and significant and unavoidable*.

- **Cumulative Plus WHI and WHII.** The projects' incremental contribution to the significant cumulative impact would be *less than cumulatively considerable*, with the exception of Sierra College Boulevard from Douglas Boulevard to Renaissance Creek and Douglas Boulevard from Cavitt Stallman Road South to Seeno Avenue. Even with mitigation, the projects' incremental contribution to the significant cumulative impact would be *cumulatively considerable and significant and unavoidable*.

WHI

Table 17-20 presents the ADT volumes, V/C, and LOS at the study roadway segments under Cumulative Plus WHI conditions. As shown in the table, the following roadway segments would operate at an unacceptable LOS F under Cumulative Plus WHI conditions:

- Douglas Boulevard: Sierra College Boulevard to Cavitt Stallman Road South (Segment #1);
- Douglas Boulevard: Cavitt Stallman Road South to Woodgrove Way/Quail Oaks Drive (Segment #2);
- Douglas Boulevard: Woodgrove Way/Quail Oaks Drive to Seeno Avenue (Segment #3);
- Douglas Boulevard: Seeno Avenue to Barton Road (Segment #4);
- Douglas Boulevard: Barton Road to Auburn Folsom Road (Segment #5); and
- Auburn Folsom Road: Douglas Boulevard to Eureka Road (Segment #9).

The same segments would operate unacceptably under cumulative conditions without the WHI project. However, none of the roadway segments listed would experience a daily traffic volume increase of 100 or more project generated trips per lane. The largest increase in ADT on the above segments is on Douglas Boulevard from Woodgrove Way to Seeno Avenue, which would increase by 200 ADT, or approximately 50 ADT per lane (Douglas Boulevard is four lanes on this segment). Therefore, the WHI project would not conflict with the applicable Placer County and City of Roseville significance thresholds, and the project's incremental contribution to the cumulative impacts noted above would be less than cumulatively considerable.

WHII

Table 17-21 presents the ADT volumes, V/C, and LOS at the study roadway segments under Cumulative Plus WHII conditions. As shown in the table, the following roadway segments would continue to operate at an unacceptable LOS D or worse under Cumulative Plus WHII conditions, similar to Cumulative No Project conditions:

- Douglas Boulevard: Sierra College Boulevard to Cavitt Stallman Road South (Segment #1);
- Douglas Boulevard: Cavitt Stallman Road South to Woodgrove Way/Quail Oaks Drive (Segment #2);

**Table 17-20
 Study Roadway Segment LOS – Cumulative Plus WHI Conditions**

Segment	Classification	Cumulative No Project			Cumulative Plus WHI		
		ADT	V/C	LOS	ADT	V/C	LOS
1. Douglas Blvd.: Sierra College Blvd. to Cavitt Stallman Rd. South	6-lane Arterial – HAC	54,140	1.00	F	54,310	1.01	F
2. Douglas Blvd.: Cavitt Stallman Rd. South to Woodgrove Way	4-lane Arterial – HAC	51,710	1.29	F	51,890	1.30	F
3. Douglas Blvd.: Woodgrove Way to Seeno Ave.	4-lane Arterial – HAC	50,170	1.25	F	50,370	1.26	F
4. Douglas Blvd.: Seeno Ave. to Barton Rd.	4-lane Arterial – HAC	49,880	1.25	F	49,950	1.25	F
5. Douglas Blvd.: Barton Rd. to Auburn Folsom Rd.	6-lane Arterial – MAC	48,670	1.22	F	48,730	1.22	F
6. Sierra College Blvd.: Olympus Dr. to Douglas Blvd.	6-lane Arterial – MAC	33,940	0.63	B	33,960	0.63	B
7. Sierra College Blvd.: Douglas Blvd. to Renaissance Creek	6-lane Arterial – MAC	43,120	0.80	C	43,160	0.80	C
8. Sierra College Blvd.: Renaissance Creek to Eureka Rd.	4-lane Arterial – MAC	39,960	0.74	C	39,990	0.74	C
9. Auburn Folsom Rd.: Douglas Blvd. to Eureka Rd.	4-lane Arterial – HAC	45,110	1.25	F	45,150	1.25	F
Notes: <ul style="list-style-type: none"> • MAC = moderate access control; HAC = high access control. • ADT values are rounded to the nearest 10 vehicles. • Bold text indicates unacceptable operations. 							
Source: Fehr & Peers, 2018.							

**Table 17-21
 Study Roadway Segment LOS – Cumulative Plus WHII Conditions**

Segment	Classification	Cumulative No Project			Cumulative Plus WHII		
		ADT	V/C	LOS	ADT	V/C	LOS
1. Douglas Blvd.: Sierra College Blvd. to Cavitt Stallman Rd. South	6-lane Arterial – HAC	54,140	1.00	F	54,500	1.01	F
2. Douglas Blvd.: Cavitt Stallman Rd. South to Woodgrove Way	4-lane Arterial – HAC	51,710	1.29	F	52,100	1.30	F
3. Douglas Blvd.: Woodgrove Way to Seeno Ave.	4-lane Arterial – HAC	50,170	1.25	F	50,600	1.27	F
4. Douglas Blvd.: Seeno Ave. to Barton Rd.	4-lane Arterial – HAC	49,880	1.25	F	50,030	1.25	F
5. Douglas Blvd.: Barton Rd. to Auburn Folsom Rd.	6-lane Arterial – MAC	48,670	1.22	F	48,800	1.22	F
6. Sierra College Blvd.: Olympus Dr. to Douglas Blvd.	6-lane Arterial – MAC	33,940	0.63	B	33,990	0.63	B
7. Sierra College Blvd.: Douglas Blvd. to Renaissance Creek	6-lane Arterial – MAC	43,120	0.80	C	43,210	0.80	D
8. Sierra College Blvd.: Renaissance Creek to Eureka Rd.	4-lane Arterial – MAC	39,960	0.74	C	40,020	0.74	C
9. Auburn Folsom Rd.: Douglas Blvd. to Eureka Rd.	4-lane Arterial – HAC	45,110	1.25	F	45,190	1.26	F

Notes:

- MAC = moderate access control; HAC = high access control.
- ADT values are rounded to the nearest 10 vehicles.
- **Bold** text indicates unacceptable operations. **Bold and highlighted text** indicates significant impacts.

Source: Fehr & Peers, 2018.

- Douglas Boulevard: Woodgrove Way/Quail Oaks Drive to Seeno Avenue (Segment #3);
- Douglas Boulevard: Seeno Avenue to Barton Road (Segment #4);
- Douglas Boulevard: Barton Road to Auburn Folsom Road (Segment #5); and
- Auburn Folsom Road: Douglas Boulevard to Eureka Road (Segment #9).

The segment of Sierra College Boulevard from Douglas Boulevard to Renaissance Creek would degrade from an acceptable LOS C under Cumulative No Project conditions to an unacceptable LOS D with vehicle trips generated by the WHII project. Thus, a cumulative impact would occur at the aforementioned segment.

None of the Placer County roadway segments listed would experience a daily traffic volume increase of 100 or more project generated trips per lane, with the exception of Douglas Boulevard from Woodgrove Way/Quail Oaks Drive to Seeno Avenue, which would experience an increase of 430 ADT over four lanes. This is slightly more than the 400 ADT allowed (100 ADT per lane for this four-lane segment of Douglas Boulevard). All other segments that operate at an unacceptable LOS under Cumulative No Project conditions experience an increase of no more than 390 daily vehicle trips across at least four travel lanes.

Therefore, the WHII project would conflict with Placer County's established thresholds for roadway segments, specifically for the segment of Sierra College Boulevard from Douglas Boulevard to Renaissance Creek and the segment of Douglas Boulevard from Woodgrove Way/Quail Oaks Drive to Seeno Avenue. Thus, the project's incremental contribution to the cumulative impacts for the two aforementioned segments would be cumulatively considerable.

WHI and WHII

Table 17-22 presents the ADT volumes, V/C, and LOS at the study roadway segments under Cumulative Plus WHI and WHII conditions. As shown in the table, the following roadway segments would continue to operate at an unacceptable LOS D or worse under Cumulative Plus WHI and WHII conditions:

- Douglas Boulevard: Sierra College Boulevard to Cavitt Stallman Road South (Segment #1);
- Douglas Boulevard: Cavitt Stallman Road South to Woodgrove Way/Quail Oaks Drive (Segment #2);
- Douglas Boulevard: Woodgrove Way/Quail Oaks Drive to Seeno Avenue (Segment #3);
- Douglas Boulevard: Seeno Avenue to Barton Road (Segment #4);
- Douglas Boulevard: Barton Road to Auburn Folsom Road (Segment #5); and
- Auburn Folsom Road: Douglas Boulevard to Eureka Road (Segment #9).

**Table 17-22
 Study Roadway Segment LOS – Cumulative Plus WHI and WHII Conditions**

Segment	Classification	Cumulative No Project			Cumulative Plus WHI		
		ADT	V/C	LOS	ADT	V/C	LOS
1. Douglas Blvd.: Sierra College Blvd. to Cavitt Stallman Rd. South	6-lane Arterial – HAC	54,140	1.00	F	54,670	1.01	F
2. Douglas Blvd.: Cavitt Stallman Rd. South to Woodgrove Way	4-lane Arterial – HAC	51,710	1.29	F	52,290	1.31	F
3. Douglas Blvd.: Woodgrove Way to Seeno Ave.	4-lane Arterial – HAC	50,170	1.25	F	50,810	1.27	F
4. Douglas Blvd.: Seeno Ave. to Barton Rd.	4-lane Arterial – HAC	49,880	1.25	F	50,100	1.25	F
5. Douglas Blvd.: Barton Rd. to Auburn Folsom Rd.	6-lane Arterial – MAC	48,670	1.22	F	48,870	1.22	F
6. Sierra College Blvd.: Olympus Dr. to Douglas Blvd.	6-lane Arterial – MAC	33,940	0.63	B	34,020	0.63	B
7. Sierra College Blvd.: Douglas Blvd. to Renaissance Creek	6-lane Arterial – MAC	43,120	0.80	C	43,250	0.80	D
8. Sierra College Blvd.: Renaissance Creek to Eureka Rd.	4-lane Arterial – MAC	39,960	0.74	C	40,050	0.74	C
9. Auburn Folsom Rd.: Douglas Blvd. to Eureka Rd.	4-lane Arterial – HAC	45,110	1.25	F	45,220	1.26	F
Notes: <ul style="list-style-type: none"> • MAC = moderate access control; HAC = high access control. • ADT values are rounded to the nearest 10 vehicles. • Bold text indicates unacceptable operations. Bold and highlighted text indicates significant impacts. 							
Source: Fehr & Peers, 2018.							

The segment of Sierra College Boulevard from Douglas Boulevard to Renaissance Creek would degrade from an acceptable LOS C under Cumulative No Project conditions to an unacceptable LOS D with vehicle trips generated by the WHI and WHII projects.

None of the Placer County roadway segments listed above would experience a daily traffic volume increase of 100 or more project-generated trips per lane, with the exception of Douglas Boulevard from Cavitt Stallman Road South to Seeno Avenue. The vehicle trips generated from both projects combined would add 580 to 640 daily trips to the segment. Given that Douglas Boulevard is four lanes on the segments, the additional 580 to 640 daily vehicle trips would exceed the 100 or more daily vehicle trips per lane threshold (i.e., 400 vehicle trips for these segments) identified in Placer County's significance criteria.

Therefore, the proposed projects would conflict with Placer County's established thresholds for roadway segments, specifically the segment of Sierra College Boulevard from Douglas Boulevard to Renaissance Creek and the segment of Douglas Boulevard from Cavitt Stallman Road South to Seeno Avenue. Thus, the projects' incremental contribution to the cumulative impacts for such segments would be cumulatively considerable.

Conclusion

Based on the above, the incremental contribution to significant cumulative impacts to study roadway segments under the Cumulative Plus WHI conditions would be less than cumulatively considerable. However, under both the Cumulative Plus WHII and Cumulative Plus WHI and WHII conditions, the incremental contribution of traffic would conflict with the applicable City of Roseville thresholds for the segment of Sierra College Boulevard from Douglas Boulevard to Renaissance Creek.

In addition, under Cumulative Plus WHII Conditions, the WHII project would conflict with Placer County's established thresholds for the segment of Douglas Boulevard from Woodgrove Way/Quail Oaks Drive to Seeno Avenue. Under Cumulative Plus WHI and WHII Conditions, the impacted segment of Douglas Boulevard would be expanded from Cavitt Stallman Road South to Seeno Avenue. Thus, under Cumulative Plus WHII and Cumulative Plus WHI and WHII conditions, the projects' incremental contribution to the significant cumulative impact would be *cumulatively considerable* and *significant*.

Mitigation Measure(s)

WHI: None required.

WHII: Implement Mitigation Measure 17-16.

Sierra College Boulevard from Douglas Boulevard to Renaissance Creek. Widening Sierra College Boulevard from four lanes to six lanes on the segment between Douglas Boulevard and Renaissance Creek is not feasible due to existing development on both sides of the

street. Furthermore, such widening is not consistent with the City of Roseville General Plan or GBCP.

Douglas Boulevard from Woodgrove Way/Quail Oaks Drive to Seeno Avenue. Widening Douglas Boulevard from 4 lanes to 6 lanes on the segment between Woodgrove Way/Quail Oaks Drive and Seeno Avenue would improve operations to acceptable levels (LOS C). However, the GBCP Circulation Element establishes that Douglas Boulevard should not include more than four lanes from Cavitt Stallman Road South to Auburn Folsom Road. In addition, the GBCP Circulation Element acknowledges that the local community overwhelmingly does not support further widening of Douglas Boulevard. County staff has confirmed that widening of Douglas Boulevard to include more than four lanes along this segment is not currently under consideration.

Therefore, even with payment of applicable traffic impact fees, the impacts to the above roadway segments would remain *cumulatively considerable* and *significant and unavoidable*.

WHI and WHII: This scenario assumes concurrent development of WHI and WHII. Additional mitigation beyond Mitigation Measure 17-16 would not be required under this scenario.

Sierra College Boulevard from Douglas Boulevard to Renaissance Creek. Widening Sierra College Boulevard from four lanes to six lanes on the segment between Douglas Boulevard and Renaissance Creek is not feasible due to existing development on both sides of the street. Furthermore, such widening is not consistent with the City of Roseville General Plan or GBCP.

Douglas Boulevard from Cavitt Stallman Road South to Seeno Avenue. Widening Douglas Boulevard from 4 lanes to 6 lanes on the segment between Cavitt Stallman Road South and Seeno Avenue would improve operations to acceptable levels (LOS C). However, the GBCP Circulation Element establishes that Douglas Boulevard should not include more than four lanes from Cavitt Stallman Road South to Auburn Folsom Road. In addition, the GBCP Circulation Element acknowledges that the local community overwhelmingly does not support further widening of Douglas Boulevard. County staff has confirmed that widening of Douglas Boulevard to include more than four lanes along this segment is not currently under consideration.

Therefore, even with payment of applicable traffic impact fees, the impacts to the above roadway segments would remain *cumulatively considerable* and *significant and unavoidable*.

17-16 *Prior to issuance of any Building Permits, this project shall be subject to the payment of traffic impact fees that are in effect in this area (Granite Bay), pursuant to applicable Ordinances and Resolutions. The applicant is notified that the following traffic mitigation fee(s) shall be required and shall be paid to Placer County DPWF:*

- A. *County Wide Traffic Limitation Zone: Article 15.28.010, Placer County Code*
- B. *South Placer Regional Transportation Authority (SPRTA)*

The current estimated fee is \$7,426 per single family residential unit. The fees were calculated using the information supplied. If the use or the square footage changes, then the fees will change. The fees to be paid shall be based on the fee program in effect at the time that the application is deemed complete. (ESD)

Utilities and Service Systems

17-17 Development of the proposed projects, in combination with future buildout in the GBCP area, would increase demand for utilities and service systems. Based on the analysis below and with implementation of mitigation, the projects' incremental contribution to this significant cumulative impact is less than cumulatively considerable.

WHI and WHII

The following sections will describe the potential for the proposed projects to result in cumulative impacts related to water supply, wastewater treatment or conveyance, and solid waste.

Water Supply

Water service to the project sites would be provided by the San Juan Water District (SJWD). The SJWD anticipates that cumulative development within the SJWD's Service Area, which encompasses the GBCP area, including the proposed project sites, would result in increased water demand from the SJWD Service Area, as shown in Table 15-2, of Chapter 15, Utilities and Service Systems, of this EIR. The project sites are currently designated within the GBCP for residential development, and increased water demand due to buildout of the project sites under the existing GBCP land use designations has been anticipated in the SJWD's water demand estimates. As shown in Table 15-2, of this EIR, SJWD supplies are anticipated to meet and exceed water demand associated with cumulative growth through the year 2035. While the WHI and WHII projects could result in increased water demand compared to the demands anticipated for the sites in the SJWD UWMP, the surplus water supply available to the SJWD would well exceed the potential increased water use at the WHI and WHII projects.

Consequently, adequate water supplies would exist to accommodate cumulative growth of the SJWD Service Area, which includes growth within the GBCP and increased demand due to operation of the proposed projects individually or together.

Wastewater

The potential for the proposed projects to impact wastewater treatment and wastewater conveyance are discussed in further depth below.

Wastewater Treatment

Wastewater from the proposed projects and other areas in the GBCP, City of Roseville, and Placer County are treated at the Dry Creek Wastewater Treatment Plant (WWTP). Thus, the geographic setting for cumulative wastewater impacts is the Dry Creek WWTP service area. As discussed in Chapter 15, Utilities and Service Systems, of this EIR, the WWTP's permitted average dry weather capacity of 18 million gallons per day (mgd) would not be sufficient to accommodate the wastewater anticipated to be generated due to buildout of the WWTP service area, which is estimated to reach approximately 21 mgd. Thus, improvements to the Dry Creek WWTP are likely to be needed prior to buildout of the Dry Creek WWTP's service area, and the combined impact of cumulative development within the service area would be significant.

As further discussed on pages 15-17 through 15-18 of Chapter 15 of this EIR, the Dry Creek WWTP currently has capacity to accommodate increased flows from the Dry Creek WWTP service area. WHI would contribute approximately 0.0096 mgd of wastewater, while WHII would contribute approximately 0.022 mgd of wastewater. As of 2016, the Dry Creek WWTP maintained capacity to treat an additional 9 mgd of dry weather flow.²² Thus, the Dry Creek WWTP has ample capacity to accommodate increased wastewater flows from either of the proposed projects. Additionally, the combined average dry weather flow of wastewater of 0.032 mgd for WHI and WHII could be accommodated, based on the 9 mgd of available capacity at the Dry Creek WWTP. Therefore, whether implemented independently or together, the Dry Creek WWTP has adequate capacity to treat wastewater from the proposed projects and a substantial amount of cumulative development.

The City of Roseville owns and operates the Dry Creek WWTP on behalf of the City's Regional Partners, which consist of the City of Roseville, the South Placer Municipal Utility District, and portions of unincorporated Placer County. Per the Operations Agreement among the Regional Partners, upon reaching 75 percent capacity at the WWTP, capacity improvements must be initiated. As stated above, the Dry Creek WWTP currently operates at approximately 9 mgd ADWF out of a permitted capacity of 18 mgd for an available capacity of 50 percent. Although the Dry Creek WWTP currently operates below permitted capacity, buildout demand of the Dry Creek WWTP's service area is estimated to reach approximately 21 mgd. Thus, improvements to the Dry Creek WWTP are likely to be needed prior to

²² City of Roseville. *City of Roseville General Plan 2035*. August 17, 2016.

buildout of the Dry Creek WWTP's service area. Demand from new development is currently accommodated at the WWTP on a first-come-first-served basis.²³

The County's sewer connection fees are distributed to both the County and the City of Roseville for ongoing and future upgrades to the Dry Creek WWTP. Thus, while adequate capacity exists at the Dry Creek WWTP to provide treatment to wastewater generated at either or both of the proposed project sites, the proposed projects would be required to pay sewer connection fees that would contribute towards future capacity expansions at the Dry Creek WWTP.

Considering the payment of sewer connection fees, the proposed projects' incremental contribution to the significant cumulative impact related to wastewater treatment facilities would be less than cumulatively considerable.

Wastewater Conveyance

As discussed within Chapter 15, Utilities and Service Systems, of this EIR, the proposed projects would include construction of on-site wastewater conveyance infrastructure including wastewater lines throughout the project sites. A portion of the North Trunk wastewater conveyance system within Placer County's Sewer Maintenance District 2 (SMD 2) is included within the southern portion of each project site. Both the WHI and WHII projects would include replacement of the existing portions of the North Trunk within the project sites with up-sized 21-inch lines. In addition, WHII would include replacement of a small off-site portion of the existing North Trunk.

The recently completed SMD 3 Regional Sewer Project, which re-routed wastewater flows from the SMD 3 wastewater treatment plant through the SMD 2 sewer collection system to the Dry Creek WWTP, was evaluated by Brown and Caldwell, including analysis of the adequacy of existing sewer conveyance infrastructure in existing (2010) and cumulative buildout settings. The analysis completed by Brown and Caldwell for the SMD 3 Regional Sewer Project showed that portions of the SMD 2 system would experience deficiencies under buildout of the SMD 2 and SMD 3 service areas. The creation of deficiencies due to cumulative buildout of the GBCP area would be considered a significant cumulative impact. Although the majority of the identified deficiencies are upstream of the WHI and WHII project sites, areas of anticipated deficiencies exist downstream from both the WHI and WHII project sites, as well. Because anticipated areas of deficiency are located downstream from the WHI and WHII project sites, the proposed project sites would contribute increased wastewater flows to areas of SMD 2 experiencing deficiencies.

Connection fees for wastewater are required pursuant to Section 13.12.010 of the County Code to provide for the impact of the connection on the existing capacity

²³ City of Roseville. *2015 Urban Water Management Plan* [pg. 6-7]. May 2016.

of the sewerage system. According to CEQA Section 15130(a)(3), paying a “fair share fee” is permissible as effective mitigation for cumulative impacts if the fees are part of a reasonable plan of actual mitigation that the relevant agency commits itself to implementing. The Placer County Board of Supervisors has determined that a development impact fee is needed in order to finance public improvements to wastewater infrastructure and to pay for the development’s fair share of the construction costs of these improvements. The proposed projects, whether implemented independently or together, would be subject to fair share fees, which is estimated at \$2,289.00 per equivalent dwelling unit (EDU).

In the absence of payment of such fees, implementation of the WHI and WHII projects, either independently or combined, would contribute additional wastewater flows to areas of SMD 2 experiencing deficiencies without sufficient mitigation. Accordingly, the proposed projects’ incremental contribution to the cumulative significant impacts related to development within SMD 2 would be considered cumulatively considerable and significant.

Solid Waste

Solid waste collection services would be provided by Recology Auburn Placer and the Western Regional Sanitary Landfill (WRSL) and Material Recovery Facility (MRF). With the current space available and the recovery efforts by the MRF, the WRSL is anticipated to operate through 2058.²⁴ Development of the project sites was anticipated by the GBCP. Regional development, including build out of the GBCP area, and other areas within Placer County served by the WRSL and MRF, would affect the processing capacity of the MRF and final closure date of the WRSL. Although the proposed projects include redesignation and rezoning of the project sites, the proposed projects would not be anticipated to result in significantly more intense waste generation than was previously anticipated for the project sites in the GBCP and, thus, regional solid waste planning efforts. As such, the incremental increase in demand for solid waste collection and disposal services that would result from implementation of the proposed projects has generally been anticipated by regional solid waste providers, the GBCP, and the Placer County General Plan. Therefore, the proposed projects’ incremental contribution to the cumulatively considerable impact to solid waste would be considered less than considerable when either project is considered separately, and when both projects are considered together.

Conclusion

Based on the above, given that improvements to the Dry Creek WWTP are likely to be needed prior to buildout of the Dry Creek WWTP’s service area, the combined impact of cumulative development within the service area would be significant. Furthermore, cumulative development within SMD 2 and SMD 3 would result in deficiencies within the SMD 2 wastewater conveyance trunk system upstream and downstream of the project sites.

²⁴ Western Placer Waste Management Authority. *About WPWMA*. Available at <http://www.wpwma.com/about-wpwma/>. Accessed March 2017.

However, utility providers employ various programs and mechanisms to support provision of services to new development; for example, Placer County has adopted development fees consistent with State law to facilitate the provision of public services for projects consistent with the buildout of the General Plan, and various utility providers charge connection fees and recoup costs of new infrastructure, including wastewater treatment infrastructure and future improvements to wastewater conveyance infrastructure, through standard billings for services and fair share fees.

Cumulative buildout could result in a significant cumulative impact related to wastewater treatment and conveyance infrastructure. Should payment of the aforementioned utility fees not be made, the projects' incremental contribution to the significant cumulative impact would be *cumulatively considerable* and *significant*.

Mitigation Measure(s)

Per Section 15130(a)(3) of CEQA, the payment of a "fair share fee" is permissible as effective mitigation for cumulative impacts. Thus, the following mitigation requires the proposed projects to include payment of such fees, which would be considered sufficient mitigation to reduce the projects' incremental contribution to the significant cumulative impact to a *less than cumulatively considerable* level.

WHI and WHII

17-17 Prior to recordation of the Final Map(s), the project applicant shall pay the applicable sewer fair share fees to the Environmental Utilities Division of the Department of Public Works and Facilities. Payment of such fees shall be made in compliance with Section 13.12.010 of the County's Code.

17.3 ENERGY CONSERVATION

Appendix F of the CEQA Guidelines requires that EIRs include a discussion of the potential energy impacts of a proposed project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

- (1) Decreasing overall per capita energy consumption;
- (2) Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- (3) Increasing reliance on renewable energy sources.

The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2016 California Green Building Standards Code, with which the proposed projects would be required to comply, as well as discussions regarding the proposed projects' potential effects related to each form of energy supply during construction and operations is provided below.

California Green Building Standards Code

The 2016 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the CBSC, which became effective with the rest of the CBSC on January 1, 2017. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California.

Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of Electric Vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills;
- Mandatory periodic inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 sf to ensure that all are working at their maximum capacity according to their design efficiencies;
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board; and
- For some single-family and low-rise residential development developed after January 1, 2020, mandatory on-site solar energy systems capable of producing 100 percent of the electricity demand created by the residence(s). Certain residential developments, including those developments that are subject to substantial shading, rendering the use of on-site solar photovoltaic systems infeasible, are exempted from the foregoing requirement.

Building Energy Efficiency Standards

The 2016 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy efficiency measures from the 2013 Building Energy Efficiency Standards resulting in a 28 percent reduction in energy consumption from the 2013 standards for residential structures. Energy reductions relative to previous Building Energy Efficiency Standards would be achieved through various regulations including requirements for the use of high efficacy lighting, improved water heating system efficiency, and high-performance attics and walls.

Construction Energy Use

Appendix F of the CEQA Guidelines identifies several potential sources of energy conservation impacts, including the project's construction energy requirements and energy use efficiencies by

amount and fuel type. Construction of the proposed projects would result in a temporary increase in energy consumption in the area.

For analysis purposes, construction of both the WHI and WHII projects was assumed to begin in August of 2019. Construction for the WHI project would occur over approximately 11 months, while the WHII project would be constructed over approximately 13 months. While both projects could be developed independently of each other, this analysis assumes simultaneous construction of the WHI and WHII projects in order to provide a worst-case estimate of energy use. It should be noted that per State legislation, emissions standards for construction fleets become more stringent each year. As such, should project construction occur at a later date than is currently anticipated, associated emissions and energy use would be reduced relative to the estimates presented within this EIR.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project sites would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated per the California Air Resources Board (CARB) In-Use Off-Road Diesel Vehicle Regulation, which includes measures to reduce emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements and imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. Project construction would also be required to comply with all applicable PCAPCD rules and regulations, such as Rule 218 related to architectural coatings and Rule 228 related to fugitive dust. As a result, construction equipment operating at the project sites would occur over a relatively short duration in comparison to the operational lifetime of the proposed projects, and would operate intermittently over the construction period for the projects.

The CARB has recently prepared the *2017 Climate Change Scoping Plan Update* (2017 Scoping Plan),²⁵ which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The regulations described above, with which the proposed projects must comply, as well as the required mitigation measures set forth in this EIR, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan. For example, Mitigation Measure 5-1 requires that all diesel-powered equipment greater than 100 horsepower to be used in the construction of the projects (including owned, leased, and subcontractor vehicles) must meet USEPA emissions standards for Tier 4 engines or equivalent.

²⁵ California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.

Nonetheless, construction of the proposed projects would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the sites where energy supply cannot be met via a hookup to the existing electricity grid. Project construction would not involve the use of natural gas appliances or equipment. Consistent with Section 9.36.030 of the Placer County Noise Ordinance, construction activities would be limited to the following hours: a) Monday through Friday, 6:00 AM to 8:00 PM during daylight savings; b) Monday through Friday, 7:00 AM to 8:00 PM during standard time; and c) Saturdays, 8:00 AM to 6:00 PM. Construction activities are not permitted on Sundays and federal holidays.

Electricity Demand During Construction

Typically, at construction sites, electricity from the existing grid is used to power portable and temporary lights or office trailers. Because grid electricity would be used primarily for steady sources such as lighting, not sudden, intermittent sources such as welding or other hand-held tools, the increase in electricity usage at the sites during construction would not be expected to cause any substantial peaks in demand. However, the base demand for electricity in the area would increase. Overall, construction of the projects would be over a relatively short duration in comparison to the operational lifetime of the proposed projects and electricity demand from the sites would occur intermittently throughout the buildout period of the projects. As the sites develop, operational electricity demand would become the dominant demand source. Operational electricity demand would be much greater than construction, and is discussed further below. It should be noted that standards or regulations specific to construction-related electricity usage do not currently exist.

The Pacific Gas and Electric Company (PG&E) would supply electricity to the project sites during construction of the proposed projects. Electricity is provided from PG&E-owned sources, and additional electricity supplies are purchased by PG&E from other energy providers. Thus, PG&E relies on a variety of electricity sources including hydropower, natural-gas-fired generators, nuclear, and renewable energy sources.²⁶ Construction of the proposed projects, which would result in temporary increases in electricity demand, would not cause a permanent or substantial increase in demand that would exceed PG&E's demand projections or exceed the ability of PG&E's existing infrastructure to handle such an increase. Therefore, project construction would not result in any significant impacts on local or regional electricity supplies, the need for additional capacity, or on peak or base period electricity demands. In addition, standards or regulations specific to construction-related electricity usage do not currently exist. As such, the temporary increase in electricity due to project construction activities would not be considered an inefficient, wasteful, and unnecessary consumption of energy, and significant adverse impacts on electricity resources would not occur.

²⁶ Pacific Gas & Electric Company. *Company Profile*. Available at: https://www.pge.com/en_US/about-pge/company-information/profile/profile.page. Accessed April 2018.

Oil Demand

Construction of the proposed projects would involve vehicle trips to and from the project sites by workers, delivery vehicles, and hauling trucks. Worker vehicle trips are assumed to utilize gasoline, and delivery and hauling trucks are assumed to utilize diesel fuel. Diesel fuel would also be used to power the construction and off-road equipment necessary for construction activities, including rubber-tired dozers, tractors, excavators, cranes, and other types of equipment. In addition, diesel-fueled portable generators may be used where electricity from the grid cannot be provided or for where more immediate electricity is needed, such as for welding or other hand tools. Overall, operation of construction equipment at the project sites would occur over a relatively short duration in comparison to the operational lifetime of the proposed projects and would be intermittent over the period of construction for the projects. Operational oil demand would be much greater than construction, and is discussed further below.

A number of federal, State, and local standards and regulations exist that require improvements in vehicle efficiency, fuel economy, cleaner-burning engines, and emissions reductions. For example, as noted above, CARB has adopted the In-Use Off-Road Diesel Vehicle Regulation, which is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions. Any licensed contractor for the projects and equipment would have to be in compliance with all applicable regulations, such as the in-use, off-road, heavy-duty vehicle regulation. Thus, the proposed projects would comply with existing standards related to construction fuel efficiency. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction.

Therefore, the temporary increase in gasoline and diesel consumption due to project construction activities would not be an inefficient, wasteful, and unnecessary consumption of energy, and a significant adverse impact on oil resources would not occur.

Conclusion

Construction of the proposed projects would result in a temporary increase in demand for energy resources. However, the temporary increase would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed projects would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand. As such, the WHI and WHII projects would not result in an inefficient, wasteful, and unnecessary consumption of energy. Therefore, the proposed projects would result in a *less-than-significant* impact on energy resources during construction.

Operational Energy Use

In order to ensure energy implications are considered in project decisions, Appendix F of the CEQA Guidelines requires a discussion of the potential energy impacts of a project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F identifies several potential methods of evaluating a project’s energy use, which are listed as follows and discussed in further detail below, with the exception of the projects’ construction-related energy requirements and energy use efficiencies, which are discussed above:

- The project’s energy requirements and energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak and base period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- The effects of the project on energy resources.
- The project’s projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Building Energy

Following implementation of the proposed projects, PG&E would provide electricity and natural gas to the project sites. Energy use associated with operation of the proposed projects would be typical of residential uses, requiring electricity and natural gas for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, refrigeration, appliances, security systems, and more. In addition, maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. Potential demand for electricity and natural gas associated with operation of both projects was estimated using CalEEMod and is presented in Table 17-23 below.

Table 17-23		
Estimated Electricity and Natural Gas Consumption		
	Electricity (kWh/yr)	Natural Gas (kBtu/yr)
WHI	202,651	620,033
WHII	464,408	1,420,910
WHI and WHII	633,706	2,040,943
<i>Source: CalEEMod, June 2018 (see Appendix C).</i>		

While both projects would introduce new operational energy demands to the project area, increased electricity and natural gas demand does not necessarily mean that a project would have an impact related to energy resources. Based on Appendix F of the CEQA Guidelines, a proposed project would result in an impact related to energy resources if a project would result in the inefficient use or waste of energy.

Structures included in the proposed projects would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen and the Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. Furthermore, future updates to the CBSC will likely provide increasingly stringent efficiency standards, and structures built in compliance with future CBSC would be increasingly more energy efficient. Per the California Energy Commission, single-family homes built in compliance with the 2019 CBSC will use approximately seven percent less energy due to energy efficient measures compared to homes built under the 2016 CBSC.²⁷ For new single-family homes with rooftop solar electricity generation, the 2019 CBSC would result in approximately 53 percent less energy use compared to homes built under the 2016 CBSC. As noted previously, the 2019 CBSC includes a requirement that all new low-rise residential structures (i.e., structures containing three or fewer stories) must include PV systems with annual output equal to or greater than the dwelling's annual electrical usage.²⁸ In addition, the 2019 CBSC will encourage demand responsive technologies, including battery storage and heat pump water heaters, and improve thermal envelopes of new buildings through high performance attics, walls, and windows to improve energy savings.²⁹ Based on the above, the proposed projects would not result in the inefficient or wasteful consumption of electricity or natural gas.

Transportation Energy

According to Fehr and Peers, operation of the WHI project is anticipated to result in an annual VMT of 554,508 miles, while the WHII project would result in an anticipated annual VMT of 1,270,748 miles. Operation of the combined projects would result in 1,825,256 VMT annually. The average fuel economy for the U.S. passenger vehicle fleet was 24 miles per gallon (mpg) in 2016, the most recent year such data is available.³⁰ An average of 24 mpg and an annual combined VMT of 1,825,256 would result in the consumption of approximately 1,811 barrels of gasoline a year. California is estimated to consume approximately 672 million barrels of petroleum per year.³¹ Based on the annual consumption within the State, operation of the WHI and WHII projects combined would result in a 0.00027 percent increase in the State's current consumption of gasoline. Operation of either project independently would result in a proportionally reduced consumption of gasoline. It should be noted that a portion of the trips associated with the proposed projects would not necessarily be new trips. Rather, some trips would be redistributed if residents

²⁷ California Energy Commission. *2019 Building Energy Efficiency Standards, Frequently Asked Questions*. March 2018.

²⁸ California Energy Commission. *2019 Title 24, Part 6, Building Energy Efficiency Standards Rulemaking*. April 23, 2018.

²⁹ California Energy Commission. *2019 Building Energy Efficiency Standards, Frequently Asked Questions*. March 2018.

³⁰ U.S. Energy Information Administration. *Total Energy, Table 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy*. Available at: <https://www.eia.gov/totalenergy/data/browser/?tbl=T01.08#/?f=A&start=200001>. Accessed June 2018.

³¹ U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Available at: https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA. Accessed June 2018.

from other areas relocate to the project sites. As such, energy consumption associated with project VMT would not be unique to the WHI and WHII projects.

California leads the nation in registered alternatively-fueled and hybrid vehicles. In addition, State-specific regulations encourage fuel efficiency and reduction of dependence on oil. Improvements in vehicle efficiency and fuel economy standards help to reduce consumption of gasoline and reduce the State's dependence on petroleum products. The proposed projects would be required to comply with all applicable regulations associated with vehicle efficiency and fuel economy. Furthermore, the WHI and WHII projects would include any required electric vehicle charging infrastructure within the proposed residential units.

Conclusion

As discussed above, the proposed projects' operations would involve an increase in energy consumption. However, the proposed projects would comply with all applicable standards and regulations regarding energy conservation and fuel efficiency, which would ensure that the future uses would be designed to be energy efficient to the maximum extent practicable. Accordingly, the proposed projects would not be considered to result in a wasteful, inefficient, or unnecessary usage of energy, and impacts related to operational energy would be considered *less than significant*.

17.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Per CEQA Guidelines Section 15126.2(c), this EIR is required to include consideration of significant irreversible environmental changes that would be caused by the proposed projects, should the projects be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Buildout of the project area could involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development could generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- Development of the proposed project could involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing and eventual development of the project could result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The proposed projects would likely result in or contribute to the following irreversible environmental changes:

- Conversion of undeveloped land to a residential community, thus precluding alternative land uses in the future; and
- Irreversible consumption of energy and natural resources associated with the future residents.

The most notable significant irreversible impacts would be a reduction in natural vegetation for wildlife communities; increased generation of pollutants; and the commitment of non-renewable and/or slowly renewable natural and energy resources, such as lumber and other forest products, mineral resources, and water resources during construction activities. Operations associated with future uses would also consume natural gas and electrical energy. Such irreversible impacts which are, as yet, unavoidable consequences of urban growth, are described in detail in the appropriate technical sections (Chapters 4 through 15) of this EIR.

17.5 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECTS

State CEQA Guidelines section 15126.2(d) requires an EIR to evaluate the potential growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or by encouraging and/or facilitating other activities that could induce growth. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped.

The CEQA Guidelines are clear that while an analysis of growth-inducing effects is required, it should not be assumed that induced growth is necessarily significant or adverse. This analysis examines the following potential growth-inducing impacts related to implementation of the proposed projects and assesses whether these effects are significant and adverse (see *CEQA Guidelines*, Section 15126.2[d]):

1. Foster population and economic growth and construction of housing.
2. Eliminate obstacles to population growth.
3. Affect service levels, facility capacity, or infrastructure demand.
4. Encourage or facilitate other activities that could significantly affect the environment.

Foster population and economic growth and construction of housing

As discussed under Impact 17-12 above, the total estimated population from the WHI and WHII projects, together with population estimates from existing and planned development within Granite Bay, would be 23,912. While this estimate exceeds the Year 2035 estimates in the GBCP, it does not exceed the population projections provided in the GBCP for buildout based upon land use designations and zoning, which range from 24,521 to 28,885. Thus, buildout of the proposed projects in combination with other approved developments within the project area would not result in a significant cumulative contribution to population growth within Granite Bay.

Because development of the project sites and buildout of the GBCP has been anticipated in regional development forecasts, buildout of the proposed projects in combination with other approved developments within the project area would not result in a significant cumulative contribution to population growth within Granite Bay. Thus, individual or combined development

of the WHI and WHII projects would not foster population and economic growth beyond what has been previously anticipated for Granite Bay and the surrounding region.

Eliminate obstacles to population growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services, would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

As discussed in Chapter 15, Utilities and Service Systems, of this EIR, the proposed project sites do not currently contain any existing water conveyance infrastructure; however, a 16-inch water main is located in Douglas Boulevard to the north of the sites. Both the WHI and WHII projects would require extension of the existing water main and subsequent connection of new water lines to the extended 16-inch main, which would direct water southward into the project sites. The proposed extension of the 16-inch water main infrastructure within Douglas Boulevard would be sufficiently sized to accommodate the increased demand from WHI and WHII combined, and the projects would not require the construction of any other new or expanded water conveyance infrastructure. Water conveyance infrastructure needed for the proposed projects would be constructed on-site and would be financed by the project applicant. Consequently, the construction of on-site water infrastructure would not be anticipated to result in elimination of obstacles to population growth.

While intended for use by the proposed projects, future developments could include further extension of the proposed water main to service sites to the east of the WHI or WHII sites. However, such areas to the east of the project sites have been previously anticipated for growth, and much of the area to the east of the project sites has been previously developed. The Placer County General Plan and associated EIR have already considered growth-inducing impacts related to the buildout of the areas that would be served by the proposed water line extension within Douglas Boulevard, and the induced growth need not be reconsidered (cf. *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 CA4th 859).³² This evaluation relies on the General Plan analysis pursuant to Guidelines Section 15130, subdivision (b)(1)(B). Considering that such areas have previously been anticipated for growth, the area to the east of the project sites is largely built out, and future projects would likely require further extension of the water main within Douglas Boulevard, the proposed extension of the water main to the WHI or WHII project sites would not be anticipated to result in elimination of obstacles to population growth.

In order to implement the goals and objectives of the County's General Plan and GBCP, and to mitigate the impact of additional sewage flows caused by new development to the sewerage collection and treatment system, the expansion of certain sanitary sewer facilities is necessary for the planned buildout of the GBCP.

³² Placer County. *Countywide General Plan EIR* [pg. 3-18 and 3-19]. July 1994.

With regard to wastewater infrastructure, both of the proposed project sites contain portions of an existing 18-inch SMD 2 wastewater trunk line along the southern portions of each site. Buildout of both WHI and WHII would result in construction of new wastewater conveyance lines within each project site, as well as upsizing necessary portions of the existing 18-inch North Trunk sewer conveyance line within WHI and WHII, and from the eastern boundary of the WHII project site to manhole D11-09. The improvements to the existing North Trunk sewer conveyance line are necessary to accommodate future buildout conditions of the sewer shed, including the proposed project sites. The foregoing infrastructure improvements would serve areas previously anticipated for development within Placer County. The Placer County General Plan and associated EIR have already considered growth inducing impacts related to the buildout of the areas that would be served by the trunk line running along the southern boundary of the WHI site, and the induced growth need not be reconsidered (cf. *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 CA4th 859).³³ This evaluation relies on the General Plan analysis pursuant to Guidelines Section 15130, subdivision (b)(1)(B). In addition, the projects would be subject to “fair share fees” for regional improvements to wastewater conveyance infrastructure. Given that the proposed project sites are located within a developed area and buildout of the sites with residential uses has been previously anticipated per the GBCP, the construction of wastewater infrastructure would not be anticipated to result in elimination of obstacles to population growth.

As a result of public comments received during the NOP public review period, this EIR includes a discussion of whether development of the WHI and WHII projects, individually or combined, would incentivize/induce development of the 19.2-acre Mac Bride parcel located between the WHI and WHII sites. As discussed in Chapter 14, Transportation of this EIR, north of Lot 1 in WHI and between Lots 1 and 2 in WHII, 26-foot-wide easements would be provided to the property lines of the Mac Bride property to accommodate potential future roadway connections. In addition, an easement between Lots 17 and 18 of WHI would allow for a future trail connection to and through the Mac Bride Family Trust property. The provision of direct access to the Mac Bride parcel as part of the proposed projects would help avoid the addition of another intersection on Douglas, and would pre-determine the vehicular circulation for the future redevelopment of the parcel.

The Mac Bride parcel is not owned or controlled by the project applicant and is improved with an existing single-family residence and numerous outbuildings. While the WHI and WHII projects are proposing to stub internal roadways at their common property boundaries with the Mac Bride property, access to the Mac Bride property as currently developed would still be from Douglas Boulevard, and this access has been in existence for many years and serves as the current owner’s sole access. Therefore, the proposed project would not provide access to an area for which existing access is not available. Furthermore, the Mac Bride parcel is currently designated Rural Low Density Residential and Rural Residential. The parcel is zoned Residential Agricultural, minimum Building Site of 100,000 sf (RA-B-100) and Residential Single-Family, combining Agriculture, minimum Building Site of 100,000 square feet [sf], combining Planned Residential Development of one unit per acre (RS-AG-B-100 PD=1). Such existing designations substantially limit the development potential of the parcel. The estimated development potential is eight units, though the on-site natural resources (e.g., Strap Ravine) may further limit the development potential. Thus, development of the Mac Bride parcel with an increased density of residential uses would require

³³ Placer County. *Countywide General Plan EIR* [pg. 3-18 and 3-19]. July 1994.

an amendment to the GBCP and a Rezone, which are both legislative acts requiring action by the County Board of Supervisors. Separate studies, conceptual plans, and environmental review under CEQA would also be required to consider the environmental effects of increased densities at the Mac Bride property. The potential for the proposed projects to directly enable such development is speculative, rather than a foregone conclusion.

Affect service levels, facility capacity, or infrastructure demand

Increases in population that would occur as a result of a proposed project may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental impacts. As discussed in Chapter 13, Public Services and Recreation, of this EIR, increased demands for fire and police protection services attributable to the proposed projects would not necessitate the construction of new facilities that could cause significant environmental impacts. Similarly, neither of the proposed projects would result in substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of schools. Similarly, impacts related to roads, recreation facilities, libraries, and other public facilities were determined to be less than significant for the WHI and WHII projects, both individually and combined. In addition, as discussed in Chapter 15, Utilities and Service Systems, of this EIR, wastewater generated by the proposed projects could be accommodated by existing wastewater treatment facilities and infrastructure, and existing water supply infrastructure exists to accommodate the domestic and fire flow demands associated with the proposed projects. The landfill that would serve the proposed projects has adequate capacity to manage the solid waste generated as result of the project.

Furthermore, mitigation measures set forth in Chapter 10, Hydrology and Water Quality, of this EIR would ensure that the proposed projects would not create or contribute runoff water that would exceed the capacity of the County's stormwater drainage systems. Therefore, the proposed projects would not increase population such that service levels, facility capacity, or infrastructure demand would require construction of new facilities that could cause significant environmental impacts.

Encourage or facilitate other activities that could significantly affect the environment

This EIR provides a comprehensive assessment of the potential for environmental impact associated with implementation of the WHI and WHII projects, both individually and combined. Please refer to Chapters 4 through 15 of this EIR, which comprehensively address the potential for impacts from urban development on the project sites.

Conclusion

The increase in population growth occurring as a result of the WHI and WHII projects would be within the overall buildout projections for the GBCP area, as demonstrated above. Thus, while the projects would foster population and economic growth, such growth would be similar to what has been previously anticipated for the project region, and a *less-than-significant* impact related to growth inducement would occur.

17.6 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

According to the CEQA Guidelines Section 15126.2(b), an EIR must include a description of impacts identified as significant and unavoidable, should the proposed action be implemented. When the determination is made that either mitigation is not feasible or only partial mitigation is feasible, such that the impact is not reduced to a less-than-significant level, such impacts would be considered significant and unavoidable. This section identifies significant impacts that could not be eliminated or reduced to a less-than-significant level by mitigation measures imposed by the County. The final determination of the significance of impacts and the feasibility of mitigation measures would be made by the County Board of Supervisors as part of the County's certification action. The significant and unavoidable impacts of the proposed projects are listed below.

5-1 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction. Based on the analysis, even with implementation of mitigation, the impact is *significant and unavoidable* under WHI alone and WHI and WHII combined.

14-3 Study roadway segments under Existing Plus Project conditions. Based on the analysis, the findings are as follows:

- **Existing Plus WHII.** Impacts to all study roadway segments would be *less than significant*, with the exception of Douglas Boulevard from Woodgrove Way to Seeno Avenue. Given the lack of feasible mitigation, the impact is considered *significant and unavoidable*.
- **Existing Plus WHI and WHII.** Impacts to all roadway segments would be *less than significant*, with the exception of Douglas Boulevard between Sierra College Boulevard and Seeno Avenue. The segment between Sierra College Boulevard and Cavitt Stallman Road South would be *less than significant* with mitigation. The remaining segment between Cavitt Stallman Road South and Seeno Avenue would be considered *significant and unavoidable* given the lack of feasible mitigation.

17-16 Study roadway segments under Cumulative Plus Project conditions. Based on the analysis, the findings are as follows:

- **Cumulative Plus WHII.** The project's incremental contribution to the significant cumulative impact would be *less than cumulatively considerable*, with the exception of Sierra College Boulevard from Douglas Boulevard to Renaissance Creek and Douglas Boulevard from Woodgrove Way/Quail Oaks Drive to Seeno Avenue. Even with mitigation, the project's incremental contribution to the significant cumulative impact would be *cumulatively considerable* and *significant and unavoidable*.
- **Cumulative Plus WHI and WHII.** The projects' incremental contribution to the significant cumulative impact would be *less than cumulatively considerable*, with the exception of Sierra College Boulevard from Douglas Boulevard to Renaissance Creek and Douglas Boulevard from Cavitt Stallman Road South to Seeno Avenue. Even with mitigation, the projects' incremental contribution

to the significant cumulative impact would be *cumulatively considerable and significant and unavoidable.*