CHAPTER 4: CUMULATIVE EFFECTS

4.1 - Introduction

California Environmental Quality Act (CEQA) Guidelines Section 15130 requires the consideration of cumulative impacts within an Environmental Impact Report (EIR) when a project's incremental effects are cumulatively considerable. According to CEQA ". . . the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines § 15065[a][3]). In identifying projects that may contribute to cumulative impacts, CEQA allows the use of a list of past, present, and reasonably anticipated future projects that have the potential to result in related or cumulative impacts, including those outside of the control of the lead agency.

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, the discussion need not provide as great [a level of] detail as is provided for the effects attributable to the project alone." The discussion should be guided by standards of practicality and reasonableness, and it should focus on the cumulative impact to which the identified other projects contribute rather than on the attributes of other projects that do not contribute to the cumulative impact.

In general, the cumulative study area for each particular environmental topic is defined based on what is reasonable given the environmental resource under analysis. For example, some environmental resource topics are naturally broad in their impact while others are localized. Cumulative air quality effects, for instance, considers the cumulative effect on the entire Air Basin, whereas cumulative geological hazard impacts generally define the cumulative study area as the project site and potentially projects in the immediate vicinity that may combine to result in a cumulative geological hazard impact. With these qualifications, the list of related past, present, and probable future set forth in Table 4-1 below (Cumulative Projects) extends to the entire City of American Canyon, though some resources require a larger cumulative study area and some a smaller area.

Table 4-1: Cumulative Projects

Jurisdiction	Project	Location	Characteristics	Status
City of American Canyon	Pacific Gas and Electric Company Napa Regional Center	500 Boone Road	100,668-square-foot maintenance and operations center on 24.5 acres	Pending
	Devlin Road Segment H	Project Site	3,084-lineal-foot extension of Devlin Road between Green Island Road to Boone Road; Includes Napa Valley Vine Trail	Under construction

Jurisdiction	Project	Location	Characteristics	Status
	Green Island Road Widening	Green Island Road between State Route (SR) 29 and a cul-de-sac	Reconstruction of roadway; Addition of a two-way left-turn lane, curb, gutter, sidewalks; Construction of the Napa Valley Vine Trail	Approved; Not constructed
	Napa-Vallejo Waste Management Authority Construction and Demolition Debris Recycling Facility	South Kelly Road/Devlin Road (southwest quadrant)	Enclosed construction and demolition debris recycling facility on 9 acres	Approved; Not constructed
	Napa Airport Corporate Center	South Kelly Road/Devlin Road (southeast quadrant)	300,000-square-foot business park on 35 acres	Approved; Not constructed
	Commerce Court Distribution Centers	Commerce Court	Two warehouses (224,593 square feet and 217,294 square feet) on 20.56 acres	Pending
	Sentinels of Freedom Property	West of Napa Logistics; South of Napa County Airport	Two warehouses (224,593 square feet and 217,294 square feet) on 20.56 acres	Pending
	Watson Ranch Specific Plan	East of Napa Junction	1,253 dwelling units; 50 live/work units; 93,500-square-feet commercial; 100-room hotel; 600-student school	Under construction
	Broadway District Specific Plan	SR-29 corridor from the southern city limit to Green Island Road	1,200 dwelling units; 840,000 square feet of nonresidential uses within 300 acres	Under Construction
Source: City of American Canyon 2021.				

4.2 - Cumulative Impact Analysis

The cumulative impact analysis below is guided by the requirements of CEQA Guidelines Section 15130. Key principles established by this section include:

- A cumulative impact only occurs from impacts caused by the proposed project together with other projects. An EIR should not discuss impacts that do not result from the proposed project.
- When the combined cumulative impact from the increment associated with the proposed project and other projects is not significant, an EIR need only briefly explain why the impact is not significant; detailed explanation is not required.

- An EIR may determine that a project's contribution to a cumulative effect impact would be rendered less than cumulatively considerable if a project is required to implement or fund its fair share of mitigation intended to alleviate the cumulative impact.

The cumulative impact analysis that follows relies on these principles as the basis for determining the significance of the proposed project's cumulative contribution to various impacts.

4.2.1 - Aesthetics, Light, and Glare

The geographic scope of the cumulative aesthetics, light, and glare analysis is the 0.25-mile radius surrounding the project site. This is the area within view of the project site and, therefore, the area most likely to experience cumulative changes in visual character or experience cumulative light and glare impacts.

Several of the projects listed in Table 4-1 are immediately adjacent to or within 0.25 mile of the project site (e.g., Napa Logistics Park, Napa Airport Corporate Center, Devlin Road Transfer Station Construction and Demolition Debris Recycling Facility, the Devlin Road Extension, etc.).

The project site and the surrounding area have long been planned to accommodate large industrial and warehouse uses and are isolated and separate from the residential areas of the City. The existing surrounding uses are large industrial uses. The City of American Canyon General Plan designates the project site as "Industrial," and the American Canyon Zoning Ordinance zones the project site as "General Industrial." Both land use designations permit the types of end uses envisioned by the proposed project and other existing, approved, and reasonably foreseeable future developments.

Although the development of the proposed project would fundamentally change the visual character of the project site, it would be compatible with surrounding industrial uses and would be consistent with the City of American Canyon General Plan land use designation for the project site. Because the proposed project would preserve 48 acres of the project site that contain No Name Creek and associated wetlands, this area would continue to provide a visual buffer between the industrial uses and the undeveloped marsh area near the Napa River. The project site would feature attractive landscaping consisting of trees, shrubs, and groundcover. Landscaping would be installed along internal roadways, around the buildings, and in the parking areas and would be approved and installed at the time of construction of each building. Design Permits would be required from the City to approve the specific building and site design on each lot, including building height. Furthermore, due to its location, it would not degrade any views of a scenic vista such as the Napa River or Sulphur Springs Hills. Other past projects, present projects under construction, and reasonably foreseeable projects in the surrounding area would be subject to similar landscaping and design requirements. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects, would not result in cumulatively significant aesthetic impacts.

The past, present, and reasonably foreseeable developments near the project site have contributed to—and would continue to contribute to—ambient light and glare in the project vicinity. The proposed project would install new sources of light and glare on the project site from exterior building lighting, security lighting, and lights and glare associated with vehicles accessing the project

site. Mitigation Measure (MM) AES-3 requires new exterior lighting fixtures to employ full cut-off fixtures to direct light downward and eliminate spillage. Other past, present, and reasonably foreseeable future developments in the project vicinity that involve the installation of new exterior lighting fixtures have been and would be required to implement similar standard measures to prevent light spillage. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects in the applicable geographic area, would not have a cumulatively significant impact related to light and glare.

4.2.2 - Air Quality

The geographic scope of the cumulative air quality analysis is the San Francisco Bay Area Air Basin, which covers all or portions of the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano. Air quality is impacted by topography, dominant air flows, atmospheric inversions, location, and season; therefore, using the Air Basin represents the area most likely to be impacted by air emissions. The Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines cumulative significance criteria are used in the cumulative analysis of air quality.

The Air Basin is currently designated as nonattainment for the State and federal ozone and $PM_{2.5}$ standards and the PM_{10} State standards. While an air quality plan exists for ozone, none currently exists for particulate matter. A project would be judged to conflict with or obstruct implementation of the regional air quality plan if it would result in substantial new regional emissions not foreseen in the air quality planning process. Regional emissions forecasts in the air quality plan are based on population and employment forecasts based on City and County General Plans. The proposed project is consistent with land use designations and applicable goals and policies of the American Canyon General Plan, site zoning, and other applicable land use regulatory documents. As such, the proposed project would be considered planned growth. The proposed project would not result in a substantial unplanned increase in population, employment, or regional growth or in Vehicle Miles Traveled (VMT) and would not conflict with or obstruct implementation of the air quality plan in this regard.

Additionally, the proposed project would meet all of the applicable Land Use Measures and Energy and Climate Measures contained in the BAAQMD's Clean Air Plan. For example, the proposed project would not preclude extension of a transit line or bike path, propose excessive parking beyond parking requirements, or otherwise create an impediment or disruption to implementation of any air quality plan control measures.

In developing thresholds of significance for air pollutants, BAAQMD established numerical thresholds for determining when a project's individual contributions would be cumulatively considerable. If a project does not exceed the identified significance thresholds, its emissions would not be cumulatively considerable, resulting in less than significant air quality impacts to the region's existing air quality conditions. The proposed project would emit operational criteria pollutant emissions (reactive organic gases and oxides of nitrogen) at levels that would exceed the BAAQMD CEQA Guidelines and significance thresholds. Mitigation is proposed requiring the implementation of criteria pollutant emissions reduction measures; however, mitigation would not reduce these

emissions to below BAAQMD thresholds. Because the proposed project cannot reduce criteria pollutant emissions to below BAAQMD regional thresholds with mitigation, the proposed project would contribute to a cumulatively considerable (i.e., significant and unavoidable) regional air quality impact with regard to consistency with the BAAQMD's current Clean Air Plan.

With implementation of fugitive dust control measures, the proposed project would not result in any localized construction fugitive dust impacts. The proposed project was not found to result in any CO hotspots or project-level health risk impacts to sensitive receptors or to create objectionable odors affecting a substantial number of people. Therefore, the proposed project would not contribute to any potential significant cumulative significant impact related to localized criteria pollutant impacts from fugitive dust, CO, or objectionable odors.

As noted above, the proposed project would emit operational criteria pollutant emissions (reactive organic gases and oxides of nitrogen) at levels that would exceed the BAAQMD 2010 CEQA Guidelines and significance thresholds. Therefore, the proposed project would contribute to a cumulatively significant and unavoidable regional air quality impact in regard to criteria pollutants.

As noted above, BAAQMD's established numerical thresholds for individual projects are set at levels determined to represent cumulatively considerable emissions. Since the proposed project's health risk impacts and $PM_{2.5}$ concentration at sensitive receptors are below these levels under the BAAQMD criteria, the proposed project would not result in a cumulatively considerable contribution to any potentially significant cumulative impact. Nonetheless, because of emissions from existing nearby projects, this EIR concludes that a significant cumulative impact would occur.

4.2.3 - Biological Resources

The geographic scope of the cumulative biological resources analysis is a 0.5-mile radius of the project site. The project site is located at the transition between urban development and the marshes associated with the Napa River; accordingly, habitats in these areas tend to be disrupted and impacts would be localized.

The proposed project has the potential to impact special-status plant species and several special-status bird species, including Swainson's hawk, golden eagle, northern harrier, and burrowing owl. However, through the implementation of MM BIO-1a through MM BIO-2e, impacts to these species as a result of the development of the proposed project would be reduced to less than significant levels by requiring pre-construction surveys for these species and establishing buffer zones around any active nests. Although there would be loss of foraging habitat, the cumulative loss of this resource would not be considerable due to the abundance of habitat in the American Canyon area. These mitigation measures would be consistent with other mitigation measure implemented for other projects within the local vicinity of the proposed project including the Devlin Road project and the Green Island Road Reconstruction and Widening project. With the implementation of these mitigation measures any potentially significant cumulative impacts by the probable future projects in Table 4-1, together with the proposed project, would be reduced to less than significant levels.

The proposed project would impact approximately 0.496-acres of palustrine emergent wetlands. Plans for wetland mitigation, including the preservation of an approximately 44.8-acre Wetland

Preserve, to include existing wetlands as well as established/created wetlands, are intended to offset wetland impacts of buildout development of the project site. No Name Creek is contained within the approximately 44.8-acre Wetland Preserve; no impacts to the palustrine emergent wetland swale associated with No Name Creek would occur from the proposed project in the area east of Devlin Road. No impacts would occur to areas that would be subject to California Department of Fish and Wildlife (CDFW) jurisdiction under Fish and Game Code Section 1602, therefore the development of the proposed project would not result in greater cumulative impacts to sensitive natural communities or riparian habitats.

The development of Phase 1 of the proposed project would impact 0.496 acres of palustrine emergent wetlands considered waters of the State under the Porter-Cologne Water Quality Control Act as well as 0.004 acres of palustrine emergent wetlands considered waters of the United States. As described in MM BIO-1a, these impacts would require that the applicant apply for and obtain a Nationwide Permit from the United States Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (RWQCB) for discharge within 0.004 acres of wetlands. The applicant would also need to apply for and obtain a separate Waiver of Waste Discharge from the San Francisco Bay RWQCB for impacts to 0.496 acres of WOS.

The development of Phase 2 of the proposed project would impact approximately 3.7 acres of wetlands considered both waters of the United States and State. These impacts would require that the applicant submit a separate application for an Individual Permit from USACE to include a plan to compensate for wetland losses as well as a detailed alternatives analysis under the Section 404(b)(1) guidelines to include a detailed evaluation of both on-site and off-site alternatives for the proposed project. Similar to Phase 1, these impacts would also require a Clean Water Act Section 401 Water Quality Certification and a Waiver of Waste Discharge Requirements from the San Francisco Bay RWQCB, as described in MM BIO-1b.

As described in MM BIO-1c, to compensate the loss of these wetlands an approximately 44.8-acre Wetland Preserve fronting the northern boundary of the project site would preserve 7.71 acres of existing wetlands and create approximately 4.7 acres of new wetlands within the Wetland Preserve. The creation of this Wetland Preserve and new wetlands would help offset any significant cumulative impacts to jurisdictional wetlands by the proposed project or other projects listed in Table 4-1 and reduce them to less than significant levels overall.

The wildlife corridor along No Name Creek would remain unaffected by the development of the proposed project and would be entirety contained and incorporated into the Wetland Preserve. Therefore, the proposed project would not result in substantial change in animal populations at the site, nor would it cause a fish or wildlife population to drop below self-sustaining levels. Additionally, the requirement for the implementation of a Stormwater Pollution Prevention Plan (SWPPP) would assure that water quality of nearby waterways is not affected by on-site construction activities. This mitigation measure would be consistent with other mitigation measure implemented for other projects listed in Table 4-1, including the Devlin Road project and the Green Island Road Reconstruction and Widening project. As a result, the proposed project would not result in greater cumulative impacts to potential wildlife corridors.

The development of the proposed project does have the potential to impact nesting birds if construction includes the removal of vegetation occurs during the breeding season (February 1 to August 31). However, the implementation of MM BIO-4a would avoid direct and indirect impacts to nesting birds by requiring pre-construction nesting bird surveys and establishing buffer zones around any active nests. This mitigation measures would be consistent with other mitigation measure implemented for other projects listed in Table 4-1, including the Devlin Road project and the Green Island Road Reconstruction and Widening project. With the implementation of MM BIO-4a, any cumulative impacts by the proposed project would be reduced to less than significant levels.

4.2.4 - Cultural Resources

The geographic scope of the cumulative cultural resources analysis is a 0.5-mile radius of the project site. Cultural resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site (including the off-site construction areas), the area near the project site would be the area most affected by project activities (generally within a 500-foot radius).

No listed historic resources are within the project boundaries. Thus, none would be adversely impacted by project construction, therefore no cumulative impacts would occur within the City of American Canyon or its immediate vicinity. Archaeological resource impacts tend to be localized, because the integrity of any given resource depends on what occurs in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 0.5-mile radius). Given that the proposed project would not have a known, direct impact on any known archaeological resources, cumulative project impacts are less than significant. Construction activities associated with cumulative development projects in the project vicinity may have the potential to encounter undiscovered cultural resources. These cumulative projects listed in Table 4-1 would be required to mitigate for impacts through compliance with applicable federal and State laws governing cultural resources.

Additionally, the implementation of standard construction mitigation measures would ensure undiscovered cultural resources are not adversely affected by project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources in the project vicinity. Given the standard archaeological resources mitigation measures that would apply to the cumulative projects listed in Table 4-1 (including the proposed project), the cumulative impact related to archaeological resources would be less than significant with mitigation (MM CUL-2a, 2b, and 3)

Although there is the possibility that previously undiscovered tribal cultural resources (TCRs) could be encountered by subsurface earthwork activities associated with the cumulative projects, the implementation of construction mitigation measures (MM CUL-4) would ensure that undiscovered TCRs are not adversely affected by cumulative project-related construction activities. Given the low potential for disruption, the standard conditions of approval, and mitigation measures that cumulative projects would be required to implement, the proposed project, in conjunction with

other planned and approved projects, would result in a less than significant with mitigation cumulative impact related to TCRs.

With the implementation of MM CUL-2a, MM CUL-2b, MM CUL-3, and MM CUL-4, the proposed project would not result in a significant cumulative impact to cultural resources in the City of American Canyon or surrounding area.

4.2.5 - Geology, Soils, and Seismicity

The geographic scope of the cumulative geology, soils, and seismicity analysis is the project vicinity. Adverse effects associated with geologic, soil, and seismic hazards tend to be site specific, because each project site has its own geologic and soils conditions, and each project has its own design characteristics, localized within the area near the project site most affected by project activities (generally within a 0. 5-mile radius).

Past, present, and future development projects in the project vicinity have the potential to exacerbate exposure to seismic hazards. The West Napa Fault bisects the project site and, thus, the project site may be susceptible to fault rupture during a seismic event. MM GEO-1a requires the project applicant to retain a qualified geotechnical consultant to prepare a fault investigation study and ensure project plans comply with all required setback requirements. Additionally, the project site may be subject to strong ground shaking during an earthquake; thus, MM GEO-1b requires the project applicant to retain a qualified geotechnical consultant to prepare a design-level geotechnical study and implement all California Building Standards Code applicable requirements into project plans. Other nearby past, present, and reasonably foreseeable development projects have been and may exacerbate exposure to similar potential seismic hazards and would be required to comply with the relevant State and local laws designed to mitigate seismic hazards and mitigation measures imposed under CEQA. Therefore, the proposed project in conjunction with other cumulative development would not expose people or structures to substantial adverse effects, including the risk of loss, injury, or death in the event of a major earthquake; fault rupture; ground shaking; seismic-related ground failure; landslide; or liquefaction.

Regarding soil erosion, development activities could lead to increased erosion rates on-site soils, which could cause unstable ground surfaces and increased sedimentation in nearby streams and drainage channels. MM HYD-1a requires implementation of standard stormwater pollution prevention measures to ensure earthwork activities do not result in substantial erosion off-site. This mitigation, in turn, would have to comply with the National Pollution Discharge Elimination System (NPDES) stormwater permitting program, which regulates water quality originating from construction sites. The NPDES program, which governs projects statewide (and nationwide), requires the preparation and implementation of Stormwater Pollution Prevention Programs for construction activities that disturb more than 1 acre and the implementation of Best Management Practices (BMPs) that ensure the reduction of pollutants during stormwater discharges, as well as compliance with all applicable water quality requirements. The proposed project would be required to comply with these regulations, as have and would other nearby past, present, and reasonably foreseeable development projects. Therefore, the proposed project in conjunction with other nearby cumulative development would not have a cumulatively significant impact associated with erosion.

The project site contains native soils that have shrink-swell characteristics, which may exacerbate exposure of project structures to expansive soil hazards. MM GEO-1b requires the project applicant to retain a qualified geotechnical consultant to prepare a design-level geotechnical study and incorporate all California Building Standards Code applicable requirements into project plans. Other nearby past, present, and reasonably foreseeable development projects could be exposed to expansive soil hazards and, therefore, have been and would be required to implement similar mitigation measures based on State and local regulations and CEQA requirements. As such, the proposed project, in conjunction with other nearby past, present, and reasonably foreseeable projects, would not have a cumulatively significant impact associated with expansive soils.

Paleontological resources resource impacts tend to be localized, because the integrity of any given resource depends on what occurs in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 0.5-mile radius). Given that the proposed project would not have a known, direct impact on any known paleontological resources, cumulative project impacts are less than significant. Construction activities associated with cumulative development projects in the project vicinity may have the potential to encounter undiscovered paleontological resources. These cumulative projects listed in Table 4-1 would be required to mitigate for impacts through compliance with applicable federal and State laws governing paleontological resources.

Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable planned and approved projects in the vicinity, would not have a cumulatively significant impact related to geology, soils, and seismicity.

4.2.6 - Greenhouse Gas Emissions

The geographic scope of the cumulative greenhouse gas (GHG) emissions analysis is the San Francisco Bay Area Air Basin, which covers all or portions of the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano. In a larger sense, however, the relevant geographic area is the entire Earth, as explained by the California Supreme Court. "[B]ecause of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (*Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 219.) "'With respect to climate change, an individual project's emissions would most likely not have any appreciable impact on the global problem by themselves, but they would contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe. The question therefore becomes whether the proposed project's incremental addition of greenhouse gases is "cumulatively considerable" in light of the global problem, and thus significant.'" (*Id.*, quoting Crockett, Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California's Search for Regulatory Certainty in an Uncertain World (July 2011) Golden Gate U. Envtl. L.J. 203, 207–208).)

The proposed project would emit new GHG emissions, as would other past, present, and reasonably foreseeable projects within the Air Basin. The BAAQMD has not set a numerical threshold of significance for GHG emissions from construction. The BAAQMD has a numerical threshold of

significance for GHG emissions from operation as well as a threshold on a per-service population basis. Although the proposed project would comply with relevant elements of the City of American Canyon Energy Efficiency Climate Action Plan (EECAP), such as exceeding the Title 24 standards for new construction, it exceeds both of the BAAQMD operational GHG thresholds and as such could be considered cumulatively significant. As the proposed project also includes a potential new stationary source, GHG emissions from the stationary source were compared to the BAAQMD significance threshold for GHG from stationary sources. The proposed stationary source emissions exceed the relevant BAAQMD significance threshold and as such could be considered cumulatively significant. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable future development in the Air Basin and around the world, would result in a significant cumulative GHG emissions impact. The proposed project's contribution would be cumulatively considerable and thus significant in and of itself.

4.2.7 - Hazards and Hazardous Materials

For most topics the geographic scope of the cumulative hazards and hazardous materials analysis is the project area. Adverse effects of hazards and hazardous materials tend to be localized; therefore, the area near the project area would be most affected by project activities. For the transport of hazardous materials, the geographic scope includes local and regional transportation facilities.

The proposed project would not result in any significant impacts associated with hazardous materials because there is no evidence of contamination from past uses, and any use or storage of hazardous materials during construction or operations would be subject to compliance with regulatory requirements and mitigation measures. Accordingly, all project-related impacts associated with hazardous materials were found be less than significant. As with the proposed project, other past, present, and reasonably foreseeable projects have been and would continue to be required to comply with applicable federal, State, and local regulatory requirements regarding the transport of hazardous materials, clean up of hazardous materials, and the use and storage of hazardous materials during construction and operation. Additionally, hazardous material impacts tend to be localized to individual project sites. Consequently, no significant cumulative impacts would occur.

The proposed project would create a wetland preserve in the northern portion of the project site. Mitigation is proposed requiring the implementation of a wildlife management plan to minimize the avian attractant potential of the Wetlands Preserve to avoid creating hazards to aviation. Other past, present, and reasonably foreseeable projects would not create a wildlife attractant hazard for the Napa County Airport, because required compliance with the Napa County Airport Land Use Compatibility Plan and Federal Aviation Administration (FAA) regulations would ensure inappropriate land uses do not locate near the airport. Additionally, stormwater and landscaping features of the proposed project and other land uses would include management plans to avoid or reduce the potential for wildlife hazards. Consequently, no significant cumulative impacts would occur. Therefore, the proposed project, in conjunction with other past, approved, and reasonably foreseeable future projects, would not have a cumulatively significant impact related to hazards and hazardous materials.

4.2.8 - Hydrology and Water Quality

The geographic scope of the cumulative hydrology and water quality analysis is the No Name Creek watershed, which generally encompasses the area within 0.5 mile of the project site. Hydrologic and water quality impacts tend to be localized to a watershed; therefore, the area within the No Name Creek watershed would be most affected by project activities.

The proposed project would involve short-term construction and long-term operational activities that would have the potential to degrade water quality in downstream water bodies. These activities are subject to regulatory requirements that would ensure no significant adverse impacts would occur. MM HYD-1a and MM HYD-1b would require implementation of various construction and operational water quality control measures that would prevent the release of pollutants into downstream waterways. These measures include preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of the statewide Construction General Permit and compliance with the Municipal Regional Permit, including implementation of BMPs and Low Impact Development (LID) features.

Other past, present, and reasonably foreseeable projects that propose new development have been and would be required to implement similar mitigation measures in accordance with applicable laws and regulations. The combined implementation of construction and operation water quality control measures by other past, present, and reasonably foreseeable projects would avoid, or reduce to a less than significant level, any related cumulative impacts on downstream waterways including the Napa River.

All other project-related hydrology impacts were found to be less than significant and did not require mitigation (e.g., groundwater and drainage). Other past, present, and reasonably foreseeable projects that result in groundwater and drainage impacts have been and would be required to comply with applicable laws and regulations designed to protect groundwater resources and ensure adequate drainage facilities are provided for all projects and include facilities to prevent and reduce runoff from development sites.

Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable planned and approved projects in the vicinity, would not have a cumulatively significant impact related to hydrology and water quality.

4.2.9 - Land Use

The geographic scope of the cumulative land use analysis is the area within 1 mile of the project site. Existing development in this area is predominantly industrial uses, including the airport. Projects under construction include the Napa Logistics Park Project, which is approved for warehouse and other similar uses. Foreseeable future development in the area includes the Napa Airport Corporate Center and the Devlin Road Transfer Station Construction and Demolition Debris Facility.

The proposed project would be consistent with the American Canyon General Plan, American Canyon Zoning Ordinance, and the Napa County Airport Land Use Compatibility Plan because its proposed uses are allowed under these plans. The existing uses in the area are generally industrial

and related compatible uses. Projects under consideration in the area and reasonably foreseeable future projects would be required to be consistent with the General Plan, the City's Zoning Ordinance, and the Airport Land Use Compatibility Plan. Additionally, the proposed project and other nearby development would be and have been required to implement wildlife management plans to ensure compatibility with airport operations. Consequently, the proposed project, in conjunction with past, present, and reasonably foreseeable development, would not result in a cumulatively significant land use impact.

4.2.10 - Noise

The geographic scope of the cumulative noise analysis is the project vicinity, including surrounding sensitive receptors. Noise impacts tend to be localized; therefore, the area near the project site (approximately 0.25 mile) would be the area most affected by project activities. Furthermore, given the properties and the distance between other past, present, and reasonably foreseeable development projects (more than 0.5 mile away), project-related noise would not combine with other sources further away.

The proposed project's construction noise levels may cause a temporary substantial increase in noise levels at nearby receptors. Mitigation is proposed that would require implementation of construction noise attenuation measures to reduce noise levels. Other projects in the project vicinity that could be under construction at the same time as the proposed project (such as Napa Logistics Park Phase 1 and Napa Corporate Center) could combine to expose nearby sensitive receptors to excessive construction noise from trucks and equipment. However, because noise is a localized phenomenon, the properties of noise are not additive, construction activities on these projects may not overlap, and all projects would be subject to the City's noise ordinance requirements and mitigation measures, the proposed project, together with other past, present, and probable future projects, would not result in cumulatively significant construction noise impacts.

The proposed project's construction and operational vibration levels would not exceed annoyance thresholds. Because vibration is a highly localized phenomenon, there would be no possibility for vibration associated with the proposed project to combine with vibration from other projects because of their distances from the project site. Therefore, the proposed project, together with other past, present, and probable future projects, would not result in cumulatively significant vibration impacts.

As discussed in Section 3.9, Noise, after mitigation, the proposed project's vehicular trips would not make a substantial incremental contribution to ambient noise levels under baseline-with-project and future-with-project conditions. These noise levels account for existing vehicle trips as well as vehicle trips from future projects. Furthermore, the proposed project's contribution to vehicular noise levels would not exceed the applicable thresholds of significance, which take into account existing noise levels as well as noise from trips associated with other planned or approved projects. Finally, because most of the other projects included within the scope of the transportation analysis are more than 1 mile from the project site, cumulative vehicular trips would be unlikely to add to roadway noise levels in the project vicinity. Thus, the proposed project would not combine with other projects to cause a cumulatively significant increase in ambient roadway noise.

4.2.11 - Public Services and Utilities

The geographic scope of the cumulative public services analysis is the service area of each of the providers serving the proposed project. Because of differences in the nature of the public service and utility topical areas, they are discussed separately.

Fire Protection and Emergency Medical Services

The geographic scope of the cumulative fire protection and emergency medical services analysis is the American Canyon Fire Protection District service area, which consists of the American Canyon city limits.

The proposed project would result in the development of 2.4 million square feet of high-cube warehouse on the project site. The project site is located within 3.1 miles of the nearest fire station and is within an acceptable response time for fire protection (5 minutes or less). As such, the proposed project would not create a need for new or expanded fire protection facilities and would not result in a physical impact on the environment. Additionally, the proposed project would comply with all applicable requirements of the California Fire Code, including provision of adequate emergency access points, and it would be accessible to fire apparatus. Other past, present, and reasonably foreseeable development projects in the Fire District service area have been and would be reviewed for impacts on fire protection and emergency medical services and have been and would be required to address any potential impact with mitigation. Additionally, the Fire District plans for service needs consistent with existing demands and growth anticipated in the City planning documents. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable development, would not have a cumulatively significant impact related to fire protection and emergency medical services.

Police Protection

The geographic scope of the cumulative police protection analysis is the service area of the American Canyon Police Department, which consists of the American Canyon city limits.

The proposed project and other past, present, and reasonably foreseeable projects in the police service area have been and would continue to be reviewed for impacts on police services and also have been and would continue to be required to address any potential impact with mitigation. Additionally, the police department plans for service needs consistent with existing demands and growth anticipated in the City planning documents. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable development, would not have a cumulatively significant impact related to police protection.

4.2.12 - Transportation

The geographic scope of the cumulative transportation analysis is on the nine-county San Francisco Bay Area region. VMT is evaluated and regulated at a regional level and, thus, the San Francisco Bay Area region is an appropriate geographical area.

Impact TRANS-1 concluded that the proposed project would not have a significant impact on the circulation system and, therefore, no mitigation would be necessary. As such, the proposed project would not have a cumulative considerable contribution in this regard. Impact TRANS-2 concluded that the proposed project would not have a significant impact on VMT because the proposed project would have a VMT rate of 16.24, well below the regional average of 23.00. As such, the proposed project would not have a cumulative considerable contribution in VMT.

With respect to Impact TRANS-3, the potential hazards from design features or incompatible uses are project site specific (e.g., site access, sight distance, etc.) and would not combine with other projects. The proposed project and other past, present, and reasonably foreseeable future projects have complied and must comply with local, standard requirements for transportation-related design features specifically adopted to avoid and reduce hazards from project design or the location of incompatible uses, thereby reducing the potential for significant cumulative impacts to less than significant levels. Therefore, no significant adverse cumulative impacts would result from the proposed project combined with past, present, and probable future projects.

With respect to Impact TRANS-4, the provision of adequate emergency access is site specific and would not combine with other projects. The proposed project and other past, present, and reasonably foreseeable future projects must comply with local, standard requirements for adequate emergency access specifically adopted to avoid or reduce the potential for inadequate access. Furthermore, the proposed project and other projects would not have significant impacts on the performance of the study intersections and, therefore, it can be inferred that it would also not impair emergency response to the project vicinity. Therefore, no significant adverse cumulative impacts would result.

4.2.13 - Utilities and Service Systems

Water

The geographic scope of the cumulative potable water analysis is the City of American Canyon Public Works Department service area, which encompasses the American Canyon city limits.

The proposed project's estimated demand is 23.9 acre-feet of potable water and 82.1 acre-feet of recycled water annually. The City of American Canyon 2015 Urban Water Management Plan (2015 UWMP) indicates that potable water demand and supplies would total 3,350 acre-feet and recycled water demand and supply would total 1,146 acre-feet in 2025. The proposed project's demands would represent less than 1 percent of potable water supplies and 7 percent of recycled water supplies. Furthermore, the City of American Canyon's 2015 UWMP estimates that sufficient water is available to meet the needs of the service area through the year 2040, which accounts for the City of American Canyon's long-term growth assumptions. The City has adopted the Zero Water Footprint Policy that requires all new development to completely offset its potable water demand. This is accomplished by means including, but not limited to: replacing existing potable water use with recycled water use; securing new water supplies; or repairing infrastructure to eliminate existing losses of potable water. The proposed project is required to comply with this policy, as would other projects listed in Table 4-1 that are served by the City of American Canyon's Water District.

For those projects that are located within the City's water service area and areas in the County that were included in the original water district service area, the 2015 UWMP anticipates adequate water supplies for all water year scenarios through 2040. These projects also would be required to demonstrate that they would be served with potable water service as a standard requirement of the development review process, and these projects may be required to implement water conservation measures and to meet the requirements of the Zero Water Footprint Policy. Furthermore, the proposed project does not require any off-site water facilities to be constructed and expanded and, thus, would not result in physical impacts on the environment from such activities. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects, would not have a cumulatively significant impact related to potable water supply.

Wastewater

The geographic scope of the cumulative wastewater analysis is the American Canyon Wastewater Treatment Plant service area, which encompasses the American Canyon city limits and areas within the Napa County Airport Industrial Park south of Fagan Creek.

The treatment plant has an existing design capacity of 2.5 million gallons per day (mgd) and the City has plans to increase it to 4.0 mgd over time. All future projects that are tributary to the American Canyon Wastewater Treatment Plant would be required to demonstrate that sewer service is available to ensure that adequate sanitation can be provided. The proposed project is estimated to generate 402,500 gallons of wastewater on a daily basis (0.41 mgd) at buildout. The proposed project's estimated wastewater generation of 0.41 mgd per day would represent 10 percent of the average daily flow treated by the expanded Wastewater Treatment Plant.

The sewer flows assumed from the proposed project are significantly less than anticipated for industrial projects in previous City planning documents. The lower sewer flows are a direct result of the conservation activities that reduce water use and, in turn, reduce sewer flows. The original planning documents were drafted prior to the State passing all the conservations laws (2008-2010) and before the City defined the Zero Water Footprint Policy. Thus, conservation is the main reason for reduced sewer flows estimated in previous planning documents. The City has verified that the treatment plant has enough capacity to serve the planned development for Phases 1 and 2 of the proposed project, along with other projects that would be tributary to the Wastewater Treatment Plant. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects, would not have a cumulatively significant impact related to wastewater.

Storm Drainage

The City of American Canyon Public Works Department oversees municipal storm drainage within the American Canyon city limits. The municipal storm drainage system consists of ditches, inlets, basins, and underground piping that ultimately discharges flows into the Napa River. The City maintains a Storm Drainage Master Plan and engineering standards that guide development of the municipal storm drainage system.

All future development projects in the City are required to provide storm drainage facilities that collect and detain stormwater. The storm drainage facility shall include provisions for future

upstream development and no development shall discharge at a rate that exceeds the capacity of any portion of the existing downstream system. Runoff from storms up to the 100-year return frequency are conveyed through storm facilities and disposed of in a manner that protects public and private improvements from flood hazards. The proposed project would install an on-site storm drainage system consisting of inlets, piping, and a series of detention basins. The peak discharge from the detention basin shall not exceed 90 percent of the undeveloped peak flow from the 24-hour, 100-year storm event. As such, the proposed project would ensure no net increase in stormwater would leave the project site during a peak storm event and would avoid cumulatively significant stormwater impacts to downstream waterways at times when capacity is most constrained. The proposed project would implement standard stormwater pollution prevention measures during construction to ensure downstream water quality impacts are minimized to the greatest extent possible. In addition, the proposed project would provide water quality measures to prevent pollution during project operations. Most past, and all present and reasonably foreseeable future, development must comply with these State and local requirements that ensure no significant adverse cumulative impacts would result. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects, would not have a cumulatively significant impact related to storm drainage.

Solid Waste

The geographic scope of the cumulative solid waste analysis is the City of American Canyon. American Canyon Recology provides solid waste and recycling collection services to commercial customers in the City of American Canyon.

Many past and all present and reasonably foreseeable future development projects, which have or would generate construction and operational solid waste and, depending on the volumes and end uses, have been or would be required to implement recycling and waste reduction measures. The proposed project is anticipated to generate 6,536 cubic yards of solid waste during construction and 8,064 cubic yards annually during operations. For comparison purposes, the Potrero Hills Landfill has a remaining capacity of 38.8 million cubic yards. The proposed project's construction and operational solid waste generation would represent less than 1 percent of the remaining capacity at this facility. As such, it appears that sufficient capacity would be available to serve the proposed project as well as existing and planned land uses in the City of American Canyon for the foreseeable future. Additionally, the nearby Devlin Road Transfer Station offers construction and demolition debris recycling and incentivizes such activities through pricing. Thus, it would be expected that some of the projects listed in Table 4-1 would take advantage of construction and demolition debris recycling, which would divert materials from the solid waste stream and contribute to conserving landfill capacity, thereby extending the operational life of Potrero Hills Landfill. Therefore, the proposed project, in conjunction with other past, approved, and reasonably foreseeable future projects, would not have a cumulatively significant impact related to solid waste.