

SECTION 4: CUMULATIVE EFFECTS

4.1 - Introduction

CEQA Guidelines Section 15130 requires the consideration of cumulative impacts within an EIR when a project’s incremental effects are cumulatively considerable. Cumulatively considerable means that “. . . the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” In identifying projects that may contribute to cumulative impacts, the CEQA Guidelines allow the use of a list of past, present, and reasonably anticipated future projects, producing related or cumulative impacts, including those which are 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.

The proposed project’s cumulative impacts were considered in conjunction with other proposed and approved projects in the City of Chico, the Town of Paradise, and unincorporated Butte County. Table 4-1 provides a list of the other projects considered in the cumulative analysis.

Table 4-1: Cumulative Projects

Jurisdiction	Project	Characteristics	Status
City of Chico	Sierra Gardens	79 townhouses	Approved
	Belvedere Heights 2	92 single-family dwelling units	Approved
	Meriam Park	105 single-family dwelling units	Approved
	Oak Valley	265 single-family dwelling units	Approved
	Oakdale Apartments	36 multi-family dwelling units	Approved
	Chico Senior Living Complex	77 multi-family dwelling units	Approved
	Carriage Park Apartments	141 multi-family dwelling units	Under Construction
	Oakdale Apartments	26 multi-family dwelling units	Approved
	Oak Valley Apartments	98 multi-family dwelling units	Approved
	Ulta Beauty	10,000 square feet commercial	Approved
	Southeast Chico Primary Care Clinic	44,000 square feet medical	Approved
	Mechoopda Tribal	14,000 square feet office	Proposed

Table 4-1 (cont.): Cumulative Projects

Jurisdiction	Project	Characteristics	Status
	New Earth Market	25,000 square feet grocery	Under Construction
	Galaxies Restaurant	18,200 square feet restaurant/entertainment	Approved
	Panera Bread/Noodles	7,200 square feet restaurant	Under Construction
	Ready Chef Go	6,500 square feet restaurant	Under Construction
	Starbucks	5,200 square feet restaurant	Under Construction
Town of Paradise	Walmart	227,000 square feet retail	Proposed
	Safeway	11,000 square-foot expansion	Proposed
Unincorporated Butte County	Dollar General (Durham)	9,100 square feet retail	Under Construction

Source: City of Chico, 2015; Town of Paradise, 2015; County of Butte, 2015.

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 and 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 area surrounding the project site. This is the area within view of the project and, therefore, the area most likely to experience changes in visual character or experience 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 (Ultra Beauty, Southeast Chico Primary Care Clinic, etc.). The proposed project consists of the development of 120,000 square feet of new commercial uses on 27.08 acres. The project vicinity is characterized by urban development including the existing Walmart store, the commercial uses along Business Lane and Forest Avenue, and the Chico Mall. Much of the surrounding project area has been developed within the past 25 years in compliance with the General Plan, and the City's current municipal code requirements related to design and visual character. Compliance with these standards, as well as the City's review and approval role in the planning process has ensured a visually compatible and cohesive development pattern in the surrounding area. Therefore, there is currently no existing cumulatively significant visual aesthetic impact within the project area. The project would feature buildings as high as 34 feet, 8 inches above finished grade, which would be of similar height to other buildings in the project vicinity. Additionally, the proposed project would maintain the existing landscaping along Baney Lane and Forest Avenue and install new landscaping around the expanded Walmart store, the fuel station, and the outparcels to soften the visual appearance of the project.

As stated previously, several of the projects listed in Table 4-1 are within 0.25 mile of the project site. The project site already contains existing exterior lighting fixtures, which would either be maintained or replaced with new fixtures. All new light fixtures would be subject to the provisions of Municipal Code 19.60.50, which requires that new lighting must be architecturally integrated with the character of all structures, energy-efficient, and shielded or recessed to prevent light and glare spillover onto neighboring properties. As such, no significant change in light and glare levels would occur as a result of the proposed project. Other projects that involve the installation of new exterior lighting fixtures would be required to implement similar devices to prevent light spillage. The proposed impacts would be less than significant and not require mitigation.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact relating to aesthetics, light, and glare.

4.2.2 - Air Quality/Greenhouse Gas Emissions

The geographic scope of the cumulative air quality emissions analysis is the Northern Sacramento Valley Air Basin, which covers Butte County. 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.

All of the projects listed in Table 4-1 would result in new air emissions, during construction or operations (or both). The air basin is currently in non-attainment of the federal standards for ozone and PM_{2.5}, and is in nonattainment of the state standards for ozone, PM₁₀ and PM_{2.5}. Therefore, there is an existing cumulatively significant air quality impact with respect to these pollutants.

The proposed project would emit construction and operational criteria pollutant emissions at levels that would exceed the Butte County Air Quality Management District (BCAQMD) thresholds. Mitigation is proposed requiring the implementation of criteria pollutant emissions (i.e., ozone precursors) reduction measures and would serve to reduce emissions to below BCAQMD thresholds.

Other projects that exceed BCAQMD thresholds would also be required to mitigate their impacts. Because the proposed project would reduce ozone precursor emissions to below BCAQMD thresholds through a combination of on-site and off-site mitigation measures, it would not have a cumulatively considerable contribution to the existing cumulative significant impact related to nonattainment of the state and federal ozone standards. Additionally, because the proposed project would not exceed BCAQMD thresholds for criteria pollutants (NO_x and ROG) after incorporation of mitigation, it would also not have a cumulatively significant impact associated with air quality attainment plan conflicts.

As discussed in Section 3.2, Air Quality/Greenhouse Gas Emissions, cumulative cancer, non-cancer chronic and acute health impacts, and PM_{2.5} concentrations were evaluated at the most impacted off-site sensitive receptor from all sources of Toxic Air Contaminant (TAC) emissions located within 1,000 feet of the project site. The project's individual contribution to cancer risk for all phases is within the BCAQMD's 10 in a million threshold for individual project impacts; therefore, the project would not result in a cumulatively considerable contribution to the existing, cumulatively significant TAC cancer risk.

Greenhouse gas emissions are inherently cumulative in nature, and the appropriate scope of analysis is the global climate. The proposed project and other projects would emit new greenhouse gas emissions. The proposed project's construction and operational greenhouse gas emissions would be below the BCAQMD threshold even after implementation of mitigation measures and project design features. Therefore, the project's contribution of greenhouse gas emissions would not be cumulatively significant.

All other project-related air quality impacts were found to be less than significant and did not require mitigation. Other projects that result in similar impacts would be required to mitigate for their impacts. Because the proposed project can mitigate all of these remaining air quality impacts to a level of less than significant, it would not have a related cumulatively significant impact with respect to these impact areas.

4.2.3 - Biological Resources

The geographic scope of the cumulative biological resources analysis is the region surrounding the project site. The project site is located in an area characterized by urban development and infrastructure; accordingly, habitats in these areas tend to be characterized as highly disturbed, and impacts would be localized. Recent development patterns and anticipated future growth in the Chico region is considered an existing cumulatively significant impact to biological resources due to the loss of potential habitat for rare species.

The proposed project has the potential to have significant impacts on Ahart's paronychia, Butte County meadowfoam, woolly meadowfoam, adobe lily, Bidwell's knotweed, Butte County golden clover, depauperate milkvetch, Ferris' milk-vetch, hogwallow starfish, pink creamsacs, Red Bluff dwarf rush, round-leaved filaree, Tehama navarretia, and veiny monardella. Mitigation Measure BIO-1 would require rare plant surveys for these species and implementation of relocation measures or credit purchases at an off-site mitigation bank if they are found to be present. Some of the other

projects listed in Table 4-1 are located on sites with similar biological attributes and, therefore, would be required to mitigate for impacts on special-status plant species in a manner similar to the proposed project. The required mitigation would reduce the project's contribution to any significant cumulative impact on special-status plant species to less than cumulatively considerable.

The proposed project has the potential to have significant impacts on the following special-status wildlife species: western spadefoot, burrowing owl, Swainson's hawk, bats, migratory birds/raptors, and vernal pool shrimp species. Mitigation Measures BIO-2a, BIO-2b, BIO-2c, BIO-2d, and BIO-2e are proposed requiring pre-construction surveys for these species and implementation of protection measures if they are found to be present. Some of the other projects listed in Table 4-1 are located on sites with similar biological attributes and, therefore, would be required to mitigate for impacts on special-status wildlife species in a manner similar to the proposed project. The required mitigation would reduce the project's contribution to any significant cumulative impact on special-status wildlife species to less than cumulatively considerable.

The proposed project has the potential to have significant impacts on the seasonal wetland depression in the southwest corner of the project site. Mitigation Measures BIO-2e and BIO-4 would require the applicant to either protect and avoid the wetland or obtain the requisite approvals to impact the wetland. Some of the other projects listed in Table 4-1 are located on sites that contain similar resources and, therefore, would be required to mitigate for impacts on these resources in a manner similar to the proposed project. The required mitigation would reduce the project's contribution to any significant cumulative impact on wetlands to less than cumulatively considerable.

The proposed project is within the boundaries of the Draft Butte Regional Conservation Plan, which has not been adopted at the time of this writing. Therefore, it is not an adopted or approved plan that requires a consistency determination under CEQA. As such, the proposed project, in conjunction with other projects, would not have a cumulatively significant impact on conflicts with adopted biological plans.

All other project-related biological resource impacts (e.g., wildlife movement and local biological ordinances) were found to be less than significant and did not require mitigation. Other projects that result in similar impacts would be required to mitigate for their impacts. Because the proposed project's impact on all of these remaining biological resources is less than significant, it would not have a cumulatively considerable contribution to any significant cumulative impact.

4.2.4 - Cultural Resources

The geographic scope of the cumulative cultural resources analysis is the project vicinity. 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 itself, the area near the project site would be the area most affected by project activities (generally within a 500-foot radius). No known impacts to historic, archaeological, or paleontological resources have occurred in the project vicinity as a result of past or current projects, and there is no existing cumulatively significant impact related to cultural resources.

Construction activities associated with development projects in the project vicinity may have the potential to encounter undiscovered cultural resources. These projects would be required to mitigate for impacts through compliance with applicable federal and state laws governing cultural resources. Even if a significant cumulative impact could be found, the proposed project would not make a cumulatively considerable impact with required mitigation. The likelihood of any significant cultural resources on the project site are very low given the developed nature of the site, previous disruptions to its ground and the lack of any known resource within its boundaries. Although there is the possibility that previously undiscovered resources could be encountered by subsurface earthwork activities, the implementation of standard construction mitigation measures would ensure that 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 low potential for disruption, and the comprehensiveness of mitigation measures that would apply to this project and those in the vicinity, the proposed project would not make a cumulatively considerable contribution to any potentially significant cumulative impact on cultural resources.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to cultural resources.

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 localized, and the area near the project site would be the area most affected by project activities (generally within a 0.25-mile radius). Development in the project vicinity has not included any uses or activities which would result in geology, soils or seismicity impacts (i.e., mining or other extraction activities), and there is no existing cumulatively significant impact in this regard.

Development projects in the project vicinity may have the potential to be exposed to seismic hazards. However, there is a less than significant potential of the projects in combination to expose people or structure 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. Some or all of the other projects listed in Table 4-1 would be exposed to similar seismic hazards and, therefore, would be expected to implement similar regulatory requirements and mitigation measures. As such, the proposed project, in conjunction with other projects, would not have a cumulatively significant impact associated with seismic hazards.

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. Mitigation Measure HYD-1a requires implementation of standard stormwater pollution prevention measures to ensure that 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 that ensure the reduction of pollutants during stormwater discharges, as well as compliance with all applicable water quality requirements. Thus, since the proposed project would have to comply with federal and state regulations and required mitigation measures that are designed to minimize impacts to projects on a wide geographic scale, the project's contribution to any significant cumulative erosion impact would be less than cumulatively considerable.

Finally, the project site contains native soils that may possess shrink-swell characteristics. Standard grading and soil engineering practices would abate these issues. Some or all of the other projects listed in Table 4-1 would be exposed to expansive soil hazards or unstable geologic units and, therefore, would be expected to implement similar grading and soil engineering practices to address those impacts. The proposed project would not contribute to any significant cumulative impact due to expansive soils or unstable soil units.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to geology, soils, and seismicity, assuming compliance with regulatory requirements.

4.2.6 - Hazards and Hazardous Materials

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. Hazards and hazardous materials are extensively regulated at the Federal, State and local levels. There are no land uses in the project vicinity that are known to utilize large quantities of hazardous materials or involve hazardous activities, and there is no existing cumulatively significant impact in this regard.

The proposed project would not have significant impacts associated with hazards or hazardous materials, as there is no evidence of contamination from past uses or project characteristics that involve the routine handling of large quantities of hazardous materials. Accordingly, all project-related impacts associated with hazards or hazardous materials were found to be less than significant and did not require mitigation. Other projects listed in Table 4-1 that have become contaminated from past uses or possess characteristics that involve the routine handling of large quantities of hazardous materials, would be required to mitigate for their impacts. Because hazards and hazardous materials exposure is generally localized and development activities associated with the other projects listed in Table 4-1 may not coincide with the proposed project, this effectively precludes the possibility of cumulative exposure.

Because the proposed project's impact due to hazards and hazardous materials is less than significant, it would not have a cumulatively considerable contribution to any significant cumulative impact.

4.2.7 - Hydrology and Water Quality

The geographic scope of the cumulative hydrology and water quality analysis is the project vicinity, generally areas within 0.5 mile of the project site for stormwater impacts due to natural drainage

patterns, drainage infrastructure, and impervious surfaces, which all contribute to limit the distance of stormwater flows. Hydrologic and water quality impacts tend to be localized; therefore, the area near the project site would be most affected by project activities. The nature and types of surrounding development, existing stormwater infrastructure and regulatory requirements have ensured that no cumulatively significant impacts related to water pollutants or flooding exist within the project vicinity.

Cumulative impacts to groundwater can also occur on a regional basis. California Water Service Company (Cal Water) relies exclusively on groundwater for potable water supply. The Sacramento Valley Groundwater Basin, West Butte Subbasin is characterized as having abundant water resources and has shown a historically ability to recover following drought events. The proposed project's net increase in water demand would represent less than 1 percent of Cal Water's annual pumping from the groundwater basin. Therefore, there are no existing cumulatively significant hydrology and water quality impacts in the project vicinity.

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. Mitigation Measures HYD-1a and HYD-1b are proposed that would require implementation of various construction and operational water quality control measures to prevent the release of pollutants into downstream waterways. Other projects that propose new development are required to implement similar mitigation measures in accordance with adopted regulations. The required mitigation would reduce the project's contribution to any significant cumulative water quality impact to less than cumulatively considerable.

All other project-related hydrology impacts (e.g., drainage and 100-year flood hazards) were found to be less than significant and do not require mitigation. Because all project-related hydrology impacts are less than significant, the project would not have a cumulatively considerable contribution to any significant cumulative impact for these impacts.

4.2.8 - Land Use

The geographic scope of the cumulative land use analysis is the Chico area. Land use decisions are made at the city level; therefore, the Chico area is an appropriate geographic scope. Development within Chico is governed by the City's General Plan and Municipal Code, which ensure logical and orderly development and require discretionary review to ensure that projects do not result in land use impacts due to inconsistency with the General Plan and other regulations. As a result, there is no existing cumulatively significant land use impact.

Development projects in the Chico area would continue to be required to demonstrate consistency with all applicable City of Chico General Plan and Municipal Code requirements. This would ensure that these projects comply with applicable planning regulations. Those projects listed in Table 4-1 that have been previously approved have been deemed consistent with all applicable General Plan (as amended) and Municipal Code requirements. For pending projects, the lead agency would be required to issue findings demonstrating consistency with the applicable General Plan and Municipal Code requirements if they are ultimately approved.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to land use.

4.2.9 - 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 analysis in Section 3.9, Noise includes a cumulative analysis of existing, proposed, and anticipated future noise levels near the project site. Outdoor noise measurements taken at the project site indicate that the average ambient noise levels are within the “normally acceptable” or “conditionally acceptable” range for all land uses. Therefore, there is no existing cumulatively significant noise impact in the project vicinity.

The proposed project’s construction noise levels may cause a temporary substantial increase in noise levels at nearby receptors. Mitigation is included that would require implementation of construction noise attenuation measures to reduce noise levels in addition to meeting Municipal Code limitations on construction noise. Other projects listed in Table 4-1 would be required to implement similar mitigation and adhere to Municipal Code restrictions regarding construction noise. It is highly unlikely that a substantial number of the cumulative projects would be constructed simultaneously and close enough to one another for noise impacts to be compounded, given that the projects are at widely varying stages of approval and development. Therefore, it is reasonable to conclude that construction noise from the proposed project would not combine with noise from other development projects to cause cumulatively significant noise impacts.

The proposed project’s construction and operational vibration levels would not exceed annoyance thresholds, and impacts would be less than significant. Because vibration is a highly localized phenomenon, there would be no possibility for vibration associated with the project to combine with vibration from other projects because of their distances from the project site. Therefore, the proposed project would not contribute to a cumulatively significant vibration impact.

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. Thus, the proposed project would not combine with other projects to cause a cumulatively considerable increase in ambient roadway noise.

Other projects listed in Table 4-1 would be required to evaluate noise and vibration impacts and implement mitigation, if necessary, to minimize noise impacts pursuant to local regulations. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to noise.

4.2.10 - 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. No existing cumulatively significant impacts have been identified for any of these areas, as all service providers are able to achieve the requisite level of service, capacity or response times.

Fire Protection and Emergency Medical Services

The geographic scope of the cumulative fire protection and emergency medical services analysis is the Chico Fire Department's service area, which consists of the Chico city limits and nearby unincorporated areas of Butte County. The service area is approximately 33 square miles and has a full time service population of 88,634 persons.

The proposed project would result in the development of 120,000 square feet of new commercial uses on the project site, which currently supports a 131,302 square-foot Walmart store. The project site is located within 0.9 mile of the nearest fire station and is within an acceptable response time for fire protection. 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 development projects in the Fire Department service area would be reviewed for impacts on fire protection and emergency medical services and would be required to address any potential impacts with mitigation. According to the Fire Department, existing facilities are sufficient to serve the proposed project in conjunction with existing and cumulative projects. Therefore, the proposed project, in conjunction with other future projects, 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 local service areas of the Chico Police Department, which consist of the Chico city limits.

The proposed project would result in the development of 120,000 square feet of new commercial uses on the project site, which currently supports a 131,302 square-foot Walmart store. The Police Department indicated that the increase in calls attributable to the proposed project would not be significant enough to adversely affect its service level. As such, the proposed project would not create a need for new or expanded police protection facilities and, therefore, would not result in a physical impact on the environment. Other development projects within the Police Department service area would be reviewed for impacts on police protection and would be required to address any potential impacts with mitigation. According to the Police Department, existing facilities are sufficient to serve the proposed project in conjunction with existing and cumulative projects. Therefore, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to police protection.

Water

The geographic scope of the cumulative potable water analysis is the California Water Service Company (Cal Water) Chico-Hamilton City District service area, which encompasses Chico, Hamilton City, and nearby unincorporated areas of Butte County. The Chico-Hamilton City District service area population was estimated to be 99,630. Water supply impacts are analyzed in Section 3.10, Public Services and Utilities of this EIR, which concluded that Cal Water has adequate potable and recycled water supplies to serve the proposed project, as well as other existing and future users. Therefore, there is no existing cumulatively significant impact related to potable water supply.

The proposed project is estimated to demand 59.7 acre-feet per year of potable water, which represents a net increase of 48.1 acre-feet above existing demand. The Cal Water 2010 Urban Water Management Plan indicates that potable water supplies were estimated to be 32,069 acre-feet in 2015 and are expected to increase to 42,550 acre-feet in 2040. Actual groundwater supplies available to Cal Water are significantly greater than the 2015-2040 supply totals reported in the Urban Water Management Plan, as the company only pumps what it needs to meet demand. (Based on the design capacity of its current wells, Cal Water could pump as much as 90,288 acre-feet/year). The proposed project's net increase in demand would represent less than 1 percent of potable water supplies under all scenarios between 2015 and 2040. Furthermore, Cal Water's 2010 Urban Water Master Plan estimates that sufficient water is available to meet the needs of the service area through the year 2040, which accounts for the long-term growth assumptions within the service area.

It should be noted that not all of the projects listed in Table 4-1 are located within the Cal Water service area. However, for those projects that are located within the Cal Water service area, the 2010 Urban Water Management Plan 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 to the extent they are required. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to water supply.

Wastewater

The geographic scope of the cumulative wastewater analysis is the Chico Water Pollution Control Plant service area, which treats effluent from the City of Chico.

All future projects 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 15,998 gallons of wastewater on a daily basis (0.016 million gallons per day [mgd]), which represents a net increase of 12,184 gallons (0.012 mgd) over existing generation. The Chico Water Pollution Control Plant has a treatment capacity of 12.0 mgd and currently treats an average of 7.0 mgd. The net increase of 0.0129 mgd attributable to the proposed project represents less than 1 percent of flows received from the service area (7.0 mgd), and would not exceed the capacity of the treatment plant. As such, the plant would be expected to accept the proposed project's increase in effluent without needing to expand existing or construct new facilities, as the treatment capacity is sufficient to serve both the project and planned future development in the area. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to wastewater.

Storm Drainage

The geographic scope of the cumulative storm drainage analysis is municipal storm drainage in the project vicinity, as these facilities would receive the project's runoff.

All future development projects in the project vicinity would be required to provide drainage facilities that collect and detain runoff such that off-site releases are controlled and do not create

flooding. The proposed project would install an on-site stormwater retention and drainage system designed to reduce the peak flows generated in the developed condition to the peak flows in the predevelopment condition. This would ensure that the proposed project would not contribute to downstream flooding conditions during peak storm events and would avoid cumulatively significant stormwater impacts to downstream waterways at times when capacity is most constrained. The proposed project would also implement pollution prevention measures during construction and operations to ensure that downstream water quality impacts are minimized to the greatest extent possible. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to storm drainage.

Solid Waste

The geographic scope of the cumulative solid waste analysis are the areas served by the Neal Road Recycling and Waste Facility located in unincorporated Butte County, south of Chico.

Future development projects would generate construction and operational solid waste and, depending on the volumes and end uses, would be required to implement recycling and waste reduction measures. The proposed project is anticipated to generate 328 cubic yards of solid waste during construction and a net increase of 403 cubic yards annually during operations. For comparison purposes, the California Department of Resources Recycling and Recovery indicates that the Neal Road Recycling and Waste Facility has 20.8 million cubic yards of remaining capacity available. The project's construction and operational solid waste generation would represent less than 1 percent of the remaining capacity at these facilities. As such, sufficient capacity is available to serve the proposed project as well as existing and planned land uses in the City of Chico for the foreseeable future. Accordingly, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to solid waste.

Energy

The geographic scope of the cumulative energy analysis is the Pacific Gas & Electric (PG&E) service area. PG&E's electrical service area consists of all or part of the 47 counties in California (including Butte County), while its natural gas service area consists of 39 counties in California comprising most of the northern and central portions of the State (including Butte County).

The proposed project would demand an estimated 3.0 million kilowatt-hours (kWh) of electricity and 2,513 therms of natural gas on an annual basis, which represents increases of 1.4 million (kWh) and 1,068 therms relative to existing conditions. The proposed project's structures would be designed in accordance with Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), indoor and outdoor lighting, and illuminated signs. The incorporation of the Title 24 standards into the project would ensure that the project would not result in the inefficient, unnecessary, or wasteful consumption of energy. Therefore, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to energy consumption.

4.2.11 - Transportation

The geographic scope of the cumulative transportation analysis is the project vicinity. As discussed in the Transportation Section 3.11 of this EIR, all study intersections currently operate at LOS D or better in both peak hours, and therefore there is no existing cumulatively significant transportation impact.

All of the new development projects listed in Table 4-1 would generate new vehicle trips that may trigger or contribute to unacceptable intersection operations and roadway segment operations. All projects would be required to mitigate for their fair share of impacts. The proposed project would result in a net increase of 4,962 (weekday) daily trips, including a net increase of 194 trips during the weekday morning peak hour and a net increase of 384 trips during the weekday afternoon peak hour. Additionally, the proposed project would result in a net increase of 5,499 (Saturday) daily trips, including a net increase of 477 trips during the Saturday peak hour. Only one intersection (E. 20th Avenue/Forest Avenue) would operate at unacceptable levels under Existing Plus Project, Short-Term Plus Project, and Cumulative Plus Project Conditions. Impacts can be reduced to a level of less than significant through signal timing adjustments under Existing Plus Project and Short-Term Plus Project conditions, and, thus, the proposed project would not have cumulative contributions to unacceptable operations under these scenarios. However, physical improvements are required to improve operations to acceptable levels under Cumulative Plus Project Conditions, which are reflected in Mitigation Measure TRANS-3a. The improvements would result in restriping and signal operation changes that would achieve acceptable levels of service and, thus, would fully mitigate the impact. As such, the proposed project would not have a cumulative contribution to unacceptable operations under Cumulative Plus Project Conditions. Refer to Impacts TRANS-1 and TRANS-2 in Section 3.11, Transportation for further discussion.

The proposed project would contribute trips to a freeway segment that would operate at unacceptable levels under Cumulative Plus Project Conditions; refer to Impacts TRANS-4 in Section 3.11, Transportation. Feasible mitigation is proposed; however, it would not improve operations to acceptable levels. Therefore, the residual significance is significant and unavoidable, and the project would result in a significant and unavoidable impact by conflicting with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system; and conflicting with an applicable congestion management program. Therefore, the proposed project, in conjunction with other projects, would result in a cumulatively significant impact to unacceptable freeway operations.

For other transportation-related areas (air traffic patterns, emergency access, roadway safety hazards, public transit, bicycles and pedestrians), the proposed project would have potentially significant impacts related to roadway hazards and alternative transportation, but after the implementation of mitigation, these impacts would be reduced to a level of less than significant. Other projects that result in similar impacts would be required to mitigate for their impacts. Because the proposed project can mitigate all other transportation impacts to a level of less than significant, it would not have a related cumulatively significant impact with respect to these other topics.

4.2.12 - Urban Decay

The geographic scope of the cumulative urban decay analysis is the Market Area, which is the polygon depicted in Exhibit 3.12-1 that encompasses Chico and extends to Hamilton City (west), Forest Ranch (north), Paradise (east), and Durham (south). The Market Area population was estimated to be 161,518 in 2015.

The proposed project was estimated to generate \$64.3 million in annual retail sales. (For comparison purposes, the Market Area was estimated to have a retail sales base of \$2.1 billion in 2015.) After accounting for new sales generated by the other retail projects listed in Table 4-1, the proposed project would result in \$13.7 million in diverted sales from other Market Area food and beverage stores (i.e., grocery stores) and \$18.5 million in diverted sales from other Market Area food services and drinking places (i.e., restaurants). No significant diversion in sales from other Market Area fuel stations, general merchandise stores, or other types of retailers are anticipated due to (1) increases in Market Area demand would fully offset the sales attributable to the project or (2) the amount of new sales generated would be so low that it would not have the potential to cause significant sales diversions from other existing outlets. In the case of grocery stores, the analysis found that the proposed project, in conjunction with other retail projects listed in Table 4-1 with grocery components had the potential to close one grocery store in the City of Chico. However, the Chico market has demonstrated a robust ability to re-tenant vacant spaces during recent years such that any grocery store vacancy would be expected to be filled in a timely manner such that physical deterioration of the space would not occur. As for restaurants, although it is possible that one or more restaurants could close, it would be speculative to make any further statements in this regard as the tenants of Outparcels 2 and 3 are not known. Regardless, there are a number of recent examples of vacant restaurant spaces being retenanting in the Chico area in timely manner such that physical deterioration of the space would not occur. Therefore, the proposed project, in conjunction with other projects listed in Table 4-1, would not cumulative contribute to urban decay. Refer to Section 3.12, Urban Decay for further discussion.