# 4 CUMULATIVE IMPACTS

## 4.1 INTRODUCTION TO THE CUMULATIVE ANALYSIS

This EIR provides an analysis of cumulative impacts of the Student Housing Project considered together with other past, present, and probable future projects producing related impacts, as required by Section 15130 of the State CEQA Guidelines. The goal of such an exercise is twofold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant, and second, to determine whether the incremental contribution to any such cumulatively significant impacts by the project would be "cumulatively considerable" and thus significant. (See State CEQA Guidelines Sections 15130[a]–[b], Section 15355[b], Section 15064[h], and Section 15065[c] and *Communities for a Better Environment v. California Resources Agency* [2002] 103 Cal. App. 4th 98, 120.) In other words, the required analysis intends first to create a broad context in which to assess cumulative impacts, viewed on a geographic scale beyond the project site itself, and then to determine whether the project's incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., "cumulatively considerable").

Cumulative impacts are defined in State CEQA Guidelines Section 15355 as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." A cumulative impact occurs from "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (State CEQA Guidelines Section 15355[b]).

Consistent with State CEQA Guidelines Section 15130, the discussion of cumulative impacts in this ~~Draft~~ Final EIR focuses on significant and potentially significant cumulative impacts. Section 15130(b) of the State CEQA Guidelines provides, in part, the following:

> The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

A proposed project is considered to have a significant cumulative effect if:

- the cumulative effects of development without the project are not significant and the project's additional impact is substantial enough, when added to the cumulative effects, to result in a significant impact, or
- the cumulative effects of development without the project are already significant and the project contributes measurably to the effect.

The term "measurably" is subject to interpretation. The standards used herein to determine measurability are that the impact must be noticeable to a reasonable person or must exceed an established threshold of significance (defined throughout the resource sections in Chapter 3 of this EIR).

# 4.2 CUMULATIVE SETTING

## 4.2.1 Geographic Scope

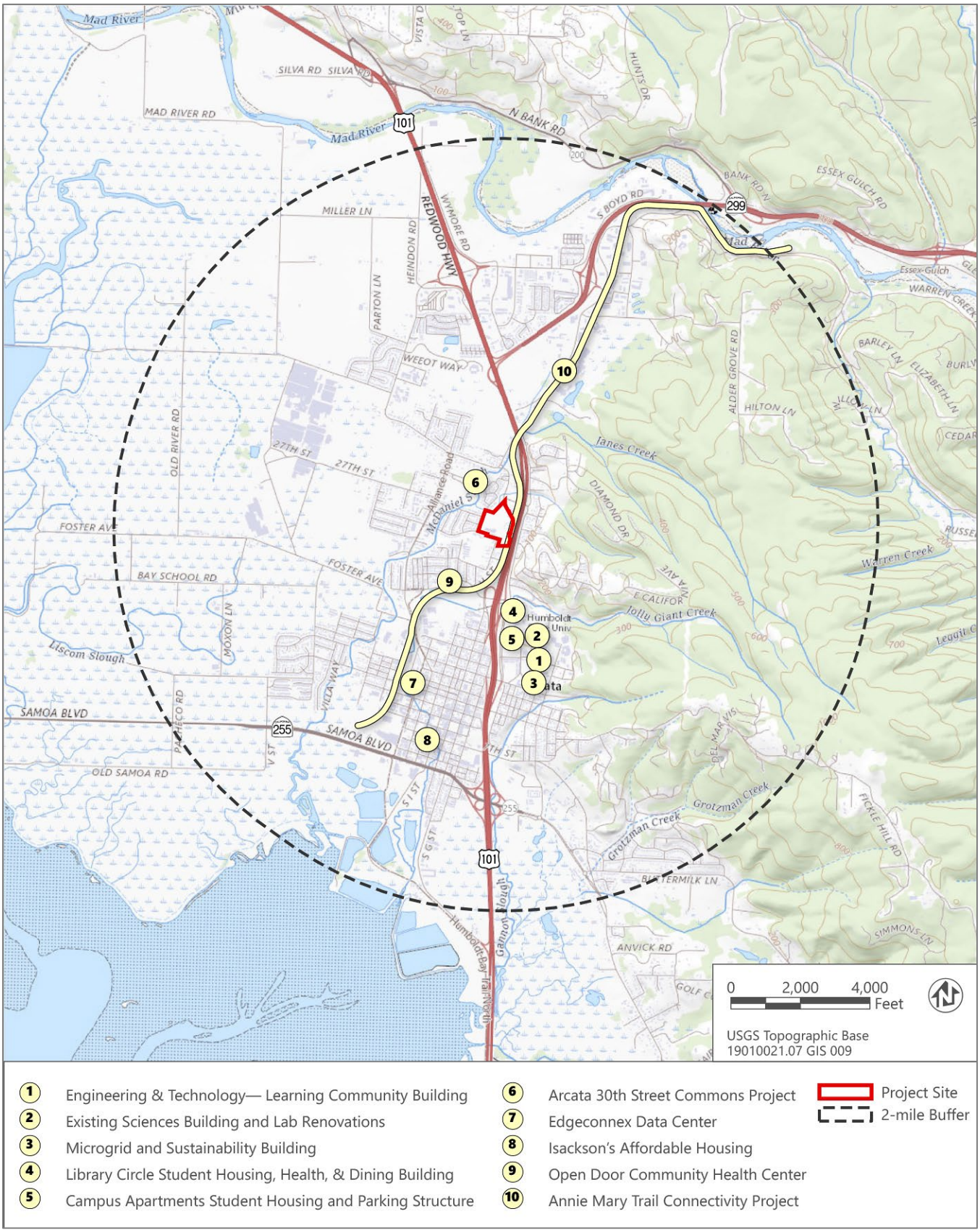
The geographic area that could be affected by the project and that is appropriate for a cumulative impact analysis varies depending on the environmental resource topic, as presented in Table 4-1. In general, the local geographic area referred to in the table is the immediate project vicinity (e.g., the project site and surrounding public viewpoints with respect to aesthetics). The regional geographic area, within the context of this EIR, is the County but could refer to an applicable habitat conservation plan area or other regional plan area.

**Table 4-1 Geographic Scope of Cumulative Impacts**

| Resource Topic | Geographic Area |
|---|---|
| Aesthetics | Local (project area and surrounding public viewpoints) |
| Air Quality | Regional (North Coast Unified Air Quality Management District—pollutant emissions that have regional effects)<br>Local (immediate vicinity—pollutant emissions that are highly localized) |
| Archaeological, Historical, and Tribal Cultural Resources | Local (project area and surrounding communities) |
| Biological Resources | Regional (County) and Local (City of Arcata) |
| Energy | Regional (Pacific Gas and Electric Company energy grid within City of Arcata and Humboldt County) |
| Greenhouse Gas Emissions | Global |
| Land Use and Planning | Local (City of Arcata) |
| Noise | Local (immediate project vicinity) |
| Population and Housing | Regional and local (Cal Poly Humboldt and surrounding communities within County, including City of Arcata) |
| Public Services and Recreation | Local (Cal Poly Humboldt and City of Arcata) |
| Transportation | Regional and local (Cal Poly Humboldt and surrounding communities within County, including City of Arcata) |
| Utilities and Service Systems | Local (utility service areas, primarily City of Arcata) |

Source: Compiled by Ascent Environmental in 2022.

As noted in Table 4-1, the potential geographic scope of some cumulative effects is more localized than others. To account for both regional and localized cumulative impacts, this EIR uses regional growth projections to assess regionally cumulative impacts and the list method to assess more localized cumulative impacts. Table 4-2 lists past, present, and probable future development projects in the vicinity of the project site. This list is not intended to be an all-inclusive list of projects in the region but rather an identification of projects constructed, approved, or under review in the vicinity of the project area that have some relation to the environmental impacts of construction and operation of the proposed project. The list of projects is based on information obtained from the City of Arcata and includes projects within approximately 2 miles of the project site. Approved and pending Cal Poly Humboldt projects that were considered part of the current (2004) Master Plan but are currently in design or under construction are also listed in Table 4-2. Figure 4-1 identifies the location of each of the cumulative projects, according to their identification number, as shown in Table 4-2 and the legend of Figure 4-1.




Source: Adapted by Ascent Environmental in 2022.

Figure 4-1 Cumulative Projects

**Table 4-2 Cumulative Projects List**

| ID No. | Project Name | Size (Acreage and/or Number of Dwelling Units) | Status |
|---|---|---|---|
| **Cal Poly Humboldt** | | | |
| 1 | Engineering & Technology – Learning Community Building | 90,000-square-foot, five-story academic building and 250-student-bed, three-story residential building in the center of the main campus. This project will replace an existing campus events field. | Approved |
| 2 | Existing Sciences Building and Lab Renovations | Modernization and interior modifications to Alistair McCrone Hall and Science A and C buildings. | Proposed |
| 3 | Microgrid and Sustainability Building | 25,000-square-foot building with academic, research, and administrative space. The structure will primarily serve as a testing facility for energy systems. | Approved |
| 4 | Library Circle Student Housing, Health, & Dining Building | 200,000-square-foot facility with 650 student beds and a five-story parking structure along Granite Avenue. | Proposed |
| 5 | Campus Apartments Student Housing and Parking Structure | New on-campus housing facility with up to 700 new student beds in two five-story structures and a 650-stall, five-story parking structure. | Proposed |
| **City of Arcata** | | | |
| 6 | Arcata 30th Street Commons Project | 36 affordable housing units with a 1-mile multiuse trail and pedestrian bridge. | Approved |
| 7 | Edgeconnex Data Center | Former feed center (10,000 square feet) in Arcata to be converted and redeveloped as a data center connecting two underground fiber optic lines, including one that extends to Singapore. | Proposed |
| 8 | Isackson's Affordable Housing | The project will retain existing commercial uses within a portion of the site and redevelop the remainder with a four-story, multifamily residential building, providing 43 affordable housing units and a manager's unit. | Approved |
| 9 | Open Door Community Health Center | Development of a health center with associated parking, lighting, signs, sidewalks, and utility infrastructure on a vacant 1.8-acre parcel. | Approved |
| 10 | Annie & Mary Rail Trail Project | 3.3-mile Class I trail between the Arcata Skate Park, northern Arcata neighborhoods, and the Mad River. | Proposed |

Sources: Cal Poly Humboldt 2022; City of Arcata 2022.

# 4.3 ANALYSIS OF CUMULATIVE IMPACTS

The following sections contain a discussion of the cumulative effects anticipated from implementation of the Student Housing Project, together with related projects and planned development in the City of Arcata and on campus, for each of the 12 environmental issue areas evaluated in this EIR. The analysis conforms with Section 15130(b) of the State CEQA Guidelines, which specifies that the "discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact."

When considered in relation to other reasonably foreseeable projects, cumulative impacts on some resources would be significant and more severe than those caused by the proposed project alone.

For purposes of this EIR, the project would result in a significant cumulative effect if:

- the cumulative effects of related projects (past, present, and probable future projects) are not significant and the incremental impact of implementing the Student Housing Project would be substantial enough, when added to the cumulative effects of related projects, to result in a new cumulatively significant impact, or
- the cumulative effects of related projects (past, present, and probable future projects) are already significant and implementation of the Student Housing Project would make a considerable contribution to the effect; The standards used herein to determine a considerable contribution are that either the impact must be substantial or it must exceed an established threshold of significance.

This cumulative analysis assumes that all mitigation measures identified in Chapter 3 to mitigate project impacts are adopted and implemented and that all elements of the design-build performance criteria that would minimize environmental effects are implemented. The analysis herein analyzes whether, after implementation of project-specific mitigation and performance criteria that minimize environmental effects, the residual impacts of the project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the project) cumulatively significant effects. Where the project would so contribute, additional mitigation is recommended where feasible.

## 4.3.1 Aesthetics

The cumulative context for the assessment of impacts on aesthetics and visual resources is limited to publicly accessible viewpoints in and around the project site. Viewer groups in the project vicinity consist of motorists, residents, recreationists, workers, and customers. The project vicinity has a low-density urban/suburban and forest character, given the presence of trees and scattered development surrounding a four-lane highway corridor. The growth, development, infrastructure, and lighting in the cumulative study area has resulted in a cumulative impact on the aesthetics of the project area. As shown in Table 4-2, "Cumulative Projects List," present and future development projects in the vicinity of the project site include new academic facilities and housing on the Cal Poly Humboldt campus, in addition to a new data center, a health center, and housing in the City of Arcata. These development projects would introduce additional, encroaching human-made elements that could further contribute to the urbanization of the existing natural landscape, degrade scenic views, and increase nighttime lighting in the cumulative study area.

As discussed in Section 3.1, "Aesthetics," the project would introduce a new student housing complex (two seven-story buildings) to the project site. The project would include design features to provide visual continuity with the existing Cal Poly Humboldt campus and surrounding environment, screen the proposed development from off-site viewpoints, minimize the perceived scale of the development from adjacent residential neighborhoods, and shield and direct lighting away from off-site properties. Despite these design features, views of the buildings would still be prominent from off-site viewpoints because of its massing and height. The project would change the visual character of the project site and surroundings by introducing an encroaching human-made element that would diminish the natural feeling of the existing landscape because it would block views of the wooded hillside, would be substantially taller, and would have a different massing and architectural style than existing buildings within the landscape. Furthermore, the project would introduce substantial new sources of nighttime lighting in proximity to light-sensitive residential land uses. The project is anticipated to be larger in terms of mass and height than any of the projects identified in Table 4-2. Therefore, the project would be cumulatively considerable with respect to cumulative impacts on scenic vistas, the visual character and quality of public views, scenic resources within a State scenic highway, and lighting within the context identified above.

Based on the above discussion, the project, in combination with past, present, and probable future development projects, would have a substantial adverse effect on scenic vistas, diminish views from a State scenic highway, degrade the visual character and quality of public views, and create substantial new light sources. Therefore, the project would result in a **significant** cumulative impact on aesthetics.

## 4.3.2 Air Quality

The cumulative context for air quality is both regional (North Coast Unified Air Quality Management District [NCUAQMD]) for criteria pollutants and local for carbon monoxide, toxic air contaminants (TAC), and odors. The land uses proposed under the project would result in an increase of emissions from area sources, energy sources, stationary sources, and mobile sources. Cumulative development in the region will continue to increase the concentration of pollutants from traffic, natural gas combustion in buildings, area sources, and stationary sources, but the future concentration of pollution will be partially reduced by State and federal policies that set emissions standards for mobile and nonmobile sources.

Further, as noted in Section 3.2, "Air Quality," the project was evaluated qualitatively for consistency with the most recently adopted air quality plan in the region. Specifically, the land uses of the project were compared to the current Master Plan for Cal Poly Humboldt (and the growth projections associated with it), which informs the growth projections of regional vehicle miles traveled (VMT) modeling and the North Coast Air Basin's (NCAB's) ability to attain ambient air quality standards. Because the Student Housing Project is consistent with growth projections of the Master Plan and the intent of the Master Plan to provide greater resources to students on Cal Poly Humboldt property, the project is consistent with applicable air quality plans and would not result in cumulatively considerable contribution to significant cumulative impacts. As a result, impacts would be **less than significant**.

In addition, the significance thresholds used to assess the project's significance in Section 3.2, "Air Quality," are cumulative in nature; that is, they identify the level of project-generated emissions above which impacts would be cumulatively considerable. Thus, they represent the level at which emissions of a given project would impede the ability of the air basin to achieve ambient air quality standards, considering anticipated growth and associated emissions in that region. A quantitative emission analysis was conducted to determine cumulative impacts from short-term construction and long-term operational emissions associated with the project.

### SHORT-TERM CONSTRUCTION

NCAB is in nonattainment for particulate matter with an aerodynamic diameter of 10 microns or less ($PM_{10}$) with respect to the California ambient air quality standards. Construction activities in the region would emit additional particulate matter and ozone precursors that may conflict with attainment efforts in the County. Because the region is in nonattainment, the existing cumulative condition is adverse and any additional emissions would exacerbate that condition. However, based on NCUAQMD's thresholds established in Rule 110 for new or modified stationary sources, exceedance of these thresholds would determine whether that particular project's emissions would be cumulatively considerable. As detailed in Section 3.2, "Air Quality," construction emissions of volatile organic compounds (VOCs) could exceed the applicable mass emission thresholds. However, Mitigation Measure 3.2-2 requires the use of low-VOC coatings (i.e., paint) during construction and would reduce construction-related VOC emissions to less than the thresholds. All other emissions would not exceed the thresholds identified for construction. Therefore, project construction emissions would not be cumulatively considerable, and the cumulative impact would be **less than significant**.

### LONG-TERM OPERATION

Similar to the analysis of construction impacts, thresholds established in NCUAQMD Rule 110 were used to determine operational emissions impacts. Project-specific emissions exceeding the emission criteria thresholds stated in Section 3.2, "Air Quality," are also considered an indication of whether a particular project's emissions would be cumulatively considerable. In general, a project that operates below the threshold levels would not result in a cumulatively significant air quality impact, and one that operates above the threshold levels would result in a cumulative impact.

Implementation of the project would result in the generation of long-term operational emissions of criteria pollutants because of mobile, energy, stationary, and areawide emissions associated with project land uses. Mobile-source emissions of criteria air pollutants and precursors would result from vehicle trips generated by employee commute trips and other associated vehicle trips (e.g., delivery of supplies, maintenance vehicles for commercial and retail land uses). Stationary and areawide sources would include the combustion of natural gas for appliances, electronics, and

other miscellaneous plug-in uses; the use of landscaping equipment and other small equipment; the periodic application of architectural coatings; and VOCs from the use of consumer products. As discussed for Impact 3.2-2, the project would not result in operational activity that would generate emissions that would exceed the thresholds for any criteria pollutants. Projects that emit criteria air pollutants in exceedance of the NCUAQMD thresholds would contribute to the regional degradation of air quality within the NCAB and would make a cumulatively considerable contribution. Because the contribution of the project's operational emissions to the nonattainment status of NCAB would not be cumulatively considerable, the cumulative impact would be **less than significant**.

### EXPOSURE TO POLLUTANT CONCENTRATIONS

TACs, which are examined in the discussion of Impact 3.2-3, are also pollutants of localized concern. High concentrations of TACs within urban areas may result from heavy vehicle traffic, industrial sources, or other sources that, when close to one another, could result in unhealthy air quality conditions for nearby receptors, which would be considered a significant cumulative impact. However, because of the highly dispersive properties of the TACs evaluated, emissions from construction or new stationary sources typically do not combine with the emissions of other adjacent sources to result in a cumulative impact. Because of the localized nature of TACs and because project-generated TAC emissions would not be substantial, project-generated increases in TAC emissions would not be cumulatively considerable. The impact would be **less than significant**.

### ODORS

The potential creation of objectionable odors affecting a substantial number of people, is also an impact of localized concern. Construction and operation of land uses under the project would not result in the development of new odor sources atypical of developed urban/suburban areas, and odor-generating construction activity would be temporary. As a result, the project's potential in contributing to cumulative odor impacts would not be cumulatively considerable. The impact would be **less than significant**.

## 4.3.3 Archaeological, Historical, and Tribal Cultural Resources

Because all significant cultural resources are unique and nonrenewable members of finite classes, meaning there are a limited number of significant cultural resources, all adverse effects erode a dwindling resource base. The loss of any one archaeological site could affect the scientific value of others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains in the region. As a result, a meaningful approach to preserving and managing cultural resources must focus on the likely distribution of cultural resources rather than on a single project or parcel boundary.

The cumulative context for historical resources is the City of Arcata, where similar patterns of development have occurred for almost two centuries. No known unique archaeological resources, tribal cultural resources (TCRs), or human remains are located within the boundaries of the project site; nonetheless, project-related earth-disturbing activities could damage undiscovered archaeological resources, TCRs, or human remains. The proposed project, in combination with other development in the region, could contribute to ongoing substantial adverse changes in the significance of unique archaeological resources resulting from further development and conversion of natural lands.

Implementing Mitigation Measure 3.3-1 would ensure that the project's contribution to cumulatively significant archaeological resource and TCR impacts would not be considerable with the requirement for preservation options and proper care of significant artifacts if they are recovered. Further, cumulative development would be required to implement similar mitigation to avoid/reduce impacts on archaeological resources and TCRs. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097 would ensure that treatment and disposition of the remains occurs in a manner consistent with State guidelines and California Native American Heritage Commission guidance. Therefore, the project would not make a considerable contribution to any significant cumulative impact related to archaeological resources and TCRs, and this cumulative impact would be **less than significant**.

### 4.3.4 Biological Resources

Sensitive habitats for biological resources in the vicinity of the project site and in the region have been modified over time as land has been developed and converted to more urban/suburban uses. Future projects in the region, including projects described in Table 4-2, could continue to result in losses of sensitive habitats and sensitive species. Although individual projects would be required to mitigate for significant impacts on a project-by-project basis, they may result in residual impacts that combine with the existing adverse condition to create a significant cumulative condition related to special-status species and sensitive habitats.

The project site and vicinity are located in an area of the City of Arcata characterized by urban/suburban and industrial development. No special-status plants have potential to occur within the proposed area of development on the project site, and there are no State or federally protected wetlands, sensitive natural communities, wildlife movement corridors, or wildlife nursery sites within the disturbance area of the project site. The existing wetlands located in the northwest portion of the site would be avoided during construction. However, project construction may result in potentially significant impacts on special-status amphibians, white-tailed kite, other nesting raptors, and other nesting native birds. Implementing Mitigation Measures 3.4-1 and 3.4-2 would minimize potential adverse effects on these species and would reduce impacts to a less-than-significant level. By mitigating project-specific impacts to less than significant, the project would reduce its overall contribution to potential biological resource impacts such that it would not result in a substantial adverse effect on resources in the area. Therefore, the project would not make a cumulatively considerable contribution with respect to biological resources, and the impact would be **less than significant**.

### 4.3.5 Energy

The geographic area considered for cumulative impacts related to energy use includes the City of Arcata, as part of the Pacific Gas and Electric Company (PG&E) service area. PG&E employs various programs and mechanisms to support the provision of gas and electricity services to new development; to recoup costs of new infrastructure, connection fees are typically charged through standard billings for services. As noted in Chapter 2, "Project Description," and Section 3.5, "Energy," the project would not require natural gas service.

Several other currently planned and approved projects identified in Table 4-2, in addition to the Student Housing Project, would receive electricity service provided by PG&E. These projects would also consume energy related to transportation (i.e., gasoline and diesel consumption for passenger vehicles, trucks, buses, and other vehicles) and construction. These projects would be required to implement energy efficiency measures in accordance with the California Energy Code (i.e., Title 24), which includes the California Green Building Standards Code (i.e., CALGreen), to reduce energy demand from buildings and would likely implement transportation demand management strategies to reduce the number of vehicle trips and VMT, which would reduce fuel consumption. There is no evidence to suggest that implementation of cumulative development would result in wasteful or inefficient use of energy; therefore, the cumulative energy impact would be **less than significant**.

According to Appendix F of the State CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. The discussion of Impact 3.5-1 concludes that the project would not result in the wasteful or inefficient use of energy or transportation-related fuel. The project would increase energy demand during temporary construction activities for new buildings and facilities; however, construction activities would not increase long-term, ongoing demand for energy or fuel because project construction is anticipated to last 5 years and would be temporary. The project would comply with applicable energy efficiency requirements and would implement design features that meet or exceed current requirements per Title 24 and CalGreen. Because the project would not result in the wasteful or inefficient use of energy and would not contribute to a significant cumulative impact, the project would not result in a considerable contribution to a significant cumulative impact. This impact would be **less than significant**.

## 4.3.6 Greenhouse Gas Emissions

The impact of greenhouse gas (GHG) emissions generated by project construction and operation, discussed in Section 3.6, "Greenhouse Gas Emissions," is inherently cumulative. GHG emissions from one project cannot, on their own, result in changes in climatic conditions; therefore, the emissions from any project must be considered in the context of their contribution to cumulative global emissions, which is the basis for determining a significant cumulative impact, as noted in Section 3.6. As a result, the analysis of GHG emissions and climate change provided in this EIR is considered to address both project-specific and cumulative impacts. As noted in Section 3.6, this impact would be **less than significant**.

## 4.3.7 Land Use and Planning

The cumulative context for land use impacts includes the existing and planned land uses at and surrounding the project site. As noted previously, Table 4-2 describes planned or approved projects anticipated for both the City of Arcata and Cal Poly Humboldt. Generally, the types of uses identified in Table 4-2 represent a continuation of existing land use types and/or redevelopment of similar land use types. However, none of the projects listed in Table 4-2 or shown in Figure 4-1 are located adjacent to or could be reasonably assumed to have a cumulatively considerable impact with the Student Housing Project and contribute to cumulative land use impacts (e.g., division of an established community). Therefore, the development of the project would not contribute to any significant cumulative land use impacts. This impact would be **less than significant**.

## 4.3.8 Noise

### CONSTRUCTION-GENERATED NOISE

Construction-related noise and vibration are typically considered localized impacts that affect only receptors close to construction activities. Therefore, unless construction of cumulative projects, including construction associated with the project, occurs on sites close to one another (i.e., less than 500 feet apart) and at the same time, noise and vibration from individual construction projects have little chance of combining to create cumulative impacts. For these reasons, cumulative noise and vibration impacts from construction are generally less than significant.

Noise and vibration associated with construction of the Student Housing Project would be intermittent and temporary and would fluctuate over the duration of construction. In addition, construction would be implemented during daytime hours, in compliance with the City's restriction that allows construction noise only during the less noise-sensitive times of the day.

Although the Annie & Mary Rail Trail would likely overlap construction of the project and would occur along the eastern boundary of the project site, the level of construction associated with the future City trail would not be dissimilar to the project's construction noise levels. Further, based on the limited amount of time that construction would occur along this segment of the trail, noise levels are not considered cumulatively considerable between the two projects (Annie & Mary Rail Trail and the project). Given that none of the other projects listed in Table 4-2 are located within 500 feet of the project site, construction activities for the project would not readily combine with construction noise and vibration from other construction activities in the area to result in a substantial increase in cumulative noise and vibration levels. Furthermore, the projects listed in Table 4-2 may not be in construction concurrently with the project. Therefore, the potential construction-generated noise and vibration impacts of those projects are not cumulatively considerable, in combination with the proposed project. Therefore, construction noise and vibration would not be cumulatively considerable, and impacts would be **less than significant**.

### OPERATIONAL NOISE

Similar to construction-related noise impacts, stationary source noise impacts are generally localized. As a result, the context for cumulative stationary noise sources is within 500 feet of the project site. The proposed project would include new stationary heating, ventilation, and air conditioning equipment and surface parking lots. However, noise from these sources would be localized and would not combine with noise from other projects. As discussed for Impact 3.8-3, noise from these sources is a consideration only within the immediate vicinity of the project site, at distances less than 100 feet from the sources. Operational noise sources at the project site would not combine with noise from other area sources to result in a substantial increase in ambient noise. As a result, the project's stationary source noise would not be cumulatively considerable.

With respect to mobile source noise levels, the cumulative context includes local roadways likely to be affected by project-related vehicles. As discussed in Section 3.8, "Noise," project-related traffic increases would not result in a substantial noise increase on affected roadways. Refer to Table 3.8-11 for further information. Based on the project list provided in Table 4-2, vehicle roadway volumes are not anticipated to double, and a doubling of roadway volumes would be required to cause a potential cumulative roadway noise impact. Cumulative traffic noise increases were modeled based on an anticipated cumulative increase in traffic on local roads, and based on the modeling, the greatest increase in noise (i.e., 2.7 A-weighted decibels [dBA]) would occur along the US 101 overcrossing between St. Louis Road and L.K. Wood Boulevard. Applying the incremental increase standards established by the City of Arcata for this segment, where cumulative no-project conditions would result in traffic noise levels of 63.6 dBA Community Noise Equivalent Level at 50 feet from the centerline of the road, the increase of 2.7 dBA would not exceed the allowable increase of 3 dB for this segment. It should further be noted that no sensitive receptors are located near this roadway segment, because it is an overpass that crosses US 101. Therefore, even though traffic in the project vicinity is expected to increase under cumulative conditions, the project's contribution to roadway noise during operation would not be cumulatively considerable. This impact would be **less than significant**.

## 4.3.9 Population and Housing

As described in Section 3.9, "Population and Housing," population within the City has increased by 4.79 percent since 2010 (refer to Table 3.9-1). In addition, the County's housing vacancy rate has been consistently higher than the State's vacancy rate, while the City's housing vacancy rate has generally remained at just over 6 percent. Implementation of the project would not increase student enrollment at Cal Poly Humboldt, nor would it exceed growth projections for the campus as established in the current Master Plan for Cal Poly Humboldt. Rather, the project would provide additional student housing on Cal Poly Humboldt property and accommodate an anticipated increase in student enrollment within campus housing. The project would not represent a substantial contribution to potential housing demand or consume a substantial portion of the available housing stock; rather, it would reduce stresses on the local and regional housing market related to students living off-campus. For these reasons, the population and housing impacts related to implementation of the project would not result in a considerable contribution to cumulative population and housing impacts, and the impact would be **less than significant**.

## 4.3.10 Public Services and Recreation

### PUBLIC SERVICES

Under existing conditions, public services are provided in the project area and surrounding area by multiple agencies, including the City of Arcata Fire Department (AFD), University Police Department (UPD), City of Arcata Police Department, Humboldt County Sheriff's Department, Arcata School District, and Northern Humboldt Union High School District. As described in Section 3.10, "Public Services and Recreation," fire services are provided by AFD, whereas police services are provided by the City, County, and UPD through mutual-aid agreement. As shown in Table 4-2, cumulative development in the region continues to increase the concentration of people and structures within these local public service jurisdictions, which in turn increases demand for such services.

The increase in population under the project would continue the trend of increasing the demand for public services and could combine with other development projects in the City listed in Table 4-2 to result in a cumulative increase in demand for public services such that new or physically altered governmental facilities would be required to maintain acceptable service ratios, response times, or other performance objectives, the construction of which could cause significant environmental impacts. As noted in Section 3.10, "Public Services and Recreation," it is not anticipated that new or expanded public facilities would be required to accommodate development under the project. Further, the new development and growth listed in Table 4-2 would occur within existing developed areas where adequate public services currently exist. To the extent that any potential expansion of public facilities is required to accommodate new development and growth in the area, it is reasonable to assume that these would be expansions of existing facilities or new facilities in already developed areas, which would typically be exempt from CEQA review as infill development. The other development projects within the City's jurisdiction that are listed in Table 4-2 would be required to pay impact fees consistent with local jurisdiction requirements, including those of the City and local school districts, to ensure the adequate provision of public services, including schools, in the future. Nonetheless, implementing the Student Housing Project would not require the expansion of service areas, nor is it anticipated to require additional facilities/services; therefore, the impact of the project on public services would not be cumulatively considerable. Cumulative impacts to public services would be **less than significant**.

### RECREATION

The cumulative context for recreation impacts encompasses the City of Arcata and Cal Poly Humboldt campus. Past and present development has resulted in an increase in demand for recreation resources and a subsequent dedication of parklands and open space consistent with State and local plans and policies. This has increased the number of developed parklands, trails, and recreation facilities, and the amount of preserved open space within the City and Cal Poly Humboldt campus.

As noted in Section 3.10, "Public Services and Recreation," the project would increase the on-site population but would not result in an overall increase in campus population (i.e., student enrollment or faculty/staff) and therefore would not increase demand for on-campus recreation facilities. Student residents of the project site would be expected to use existing on-campus recreational opportunities, as well as on-site amenities and opportunities that would be provided as part of the project. Student residents associated with the project would be expected to come from housing elsewhere within the local community or as anticipated by City and Cal Poly Humboldt growth projections. As a result, the project would not result in significant increases in demand for or the substantial deterioration of existing recreational opportunities. With respect to the City of Arcata projects listed in Table 4-2, further development of parklands and trails and preservation of open space would occur as planned development proceeds, consistent with the City requirements. Therefore, the amount of parkland is expected to increase within the City over time, consistent with the City's parkland dedication standards. In addition, new developments within the City would be required to pay fees to mitigate for increased park demands in accordance with the Quimby Act and locally adopted regulation to offset maintenance and construction of recreation facilities in response to increases in population, thereby reducing the potential contribution of off-campus development to less than cumulatively considerable. Therefore, the project would not result in a cumulatively considerable contribution to recreation, and this impact would be **less than significant**.

## 4.3.11 Transportation

The geographic context for cumulative impacts related to transportation is the City of Arcata and Cal Poly Humboldt.

### VEHICLE MILES TRAVELED

As detailed in the discussion of Impact 3.11-2, the Transportation Analysis Memo used the Humboldt County Association of Governments (HCAOG) Travel Model to calculate the VMT per capita anticipated to be generated by the project. The trip patterns in the HCAOG Travel Model were checked against location-based services (i.e., "Big Data") to confirm that

the model is reasonably replicating existing travel patterns related to Cal Poly Humboldt. For detailed information regarding trip generation, trip length, and VMT methodology and analysis, refer to Appendix B. As identified by the CSU Transportation Impact Study Manual (TISM), the project's VMT impact would be cumulatively considerable if the VMT per resident under the "with project" condition exceeds the regional VMT per resident identified under the Regional Transportation Plan/Sustainable Communities Strategy condition. As determined by the Transportation Analysis Memo, the project-generated VMT under the cumulative condition would be 15.2 VMT per resident. In comparison, the region's VMT per resident under cumulative conditions is estimated to be 23.2 (Fehr & Peers 2022); thus, the project's VMT would not exceed the CSU TISM threshold under cumulative conditions. Therefore, the project's impacts related to VMT would not be cumulatively considerable. This impact would be **less than significant**.

### IMPACTS ON TRANSIT, BICYCLE, AND PEDESTRIAN FACILITIES

As described in the discussion of Impact 3.11-1, implementation of the project would not create demand for public transit services above the crush load capacity of the transit system and would not disrupt existing or planned transit facilities and services. Additionally, as described for Impact 3.11-1, implementation of the project would not disrupt any existing or planned bicycle or pedestrian facilities. Thus, the project's impacts related to transit, bicycle, and pedestrian facilities would not be cumulatively considerable, and this impact would be **less than significant**.

### CONSTRUCTION-RELATED TRANSPORTATION IMPACTS

Cumulative impacts from project-generated construction effects on transportation may result if other future planned construction activities were to take place close to the project site and cumulatively combine to exacerbate the construction-related transportation impacts of the project. As noted in Chapter 2, "Project Description," the planned Annie & Mary Rail Trail project (a 3.3-mile Class I trail) would occur along the railroad corridor, immediately east of the project site. As discussed for Impact 3.11-3, project construction activities and staging would occur on-site. The hauling of heavy machinery (e.g., bulldozers, excavators) and operation of large trucks associated with construction-related activities may result in conflicts with pedestrians, bicyclists, and vehicles navigating the area. Therefore, if construction of the project were to occur simultaneously with construction of the Annie & Mary Rail Trail project, the construction-related transportation impacts of the two projects may combine to exacerbate construction-related transportation impacts from the project and create a significant cumulative impact. However, the construction of the Annie & Mary Rail Trail in this location and the project would be separated from nearby neighborhoods and other development such that any cumulative increase in construction traffic would not result beyond St. Louis Road and along the project site's northern boundary. Further, as detailed in the discussion of Impact 3.11-3, a temporary traffic control plan (TCP) would be completed and implemented to be consistent with industry standards. Under the TCP, project construction-related transportation impacts would be offset through the management of construction activities that would allow emergency vehicle access and delineate construction zones in a manner that protects vehicles, bicyclists, and pedestrians. Thus, the project would not be cumulatively considerable with respect to construction-related transportation impacts, and this impact would be **less than significant**.

## 4.3.12 Utilities and Service Systems

The cumulative context for utility-related impacts is the service area for each utility (water, wastewater, stormwater, solid waste). Future projects in the region, including projects described in Table 4-2, would result in increased utility service demands, but they are assumed to comply with current building codes and efficiency requirements. Given that the cumulative projects listed in Table 4-2 are located within developed areas in the City of Arcata, including Cal Poly Humboldt projects, that are served by existing utility infrastructure, it is expected that cumulative projects may need specific service connections but that no new or expanded infrastructure would be required. Therefore, impacts associated with the need for new or expanded utility infrastructure would not be cumulatively considerable.

As noted in Section 3.12, "Utilities and Service Systems," water would be supplied to the project site by the City of Arcata. The projected long-term water supplies (normal, single, and multiple dry weather years) available to the City and its customers would be sufficient to serve the City's projected future demands (i.e., potential cumulative demand) through 2045. The Student Housing Project and the cumulative projects listed in Table 4-2 would not be constructed without demonstration of adequate water supplies. Furthermore, the project, consistent with CSU Sustainability Policy requirements, would include responsible conservation strategies for reduced potable water consumption in the buildings. Ultra-low flow fixtures, automatic sensor controls, and reduced flow aerators would be used to meet or exceed current CALGreen water efficiency standards and to achieve Leadership in Energy and Environmental Design version 4 (LEED v4) certification. As a result, the project would not have a cumulatively considerable impact with respect to water supply.

As discussed in Section 3.12, "Utilities and Service Systems," the City's wastewater treatment plant is anticipated to have adequate capacity to serve the project-generated increase in wastewater flows. As a result, the project contribution would not be cumulatively considerable, because it would not add flows to the City's existing wastewater collection and treatment system in excess of existing contractual rights or peak wet weather conditions.

Generally, the capacity of solid waste facilities available to the project site and the region are continually declining as cumulative development and ongoing disposal reduce remaining capacity. However, the project's solid waste generation could be served by multiple landfills in the region, including Anderson Landfill and Dry Creek Landfill. The landfills that receive waste generated at the project site are projected to have adequate capacity for the next 30 years and beyond (refer to the discussion of Impact 3.12-5 in Section 3.12, "Utilities and Service Systems"). Given the landfills' available capacity to serve the project site and development in the area over the long term, the project would not have a cumulatively considerable impact. In addition, as discussed in Section 3.12, "Utilities and Service Systems," in accordance with Section 5.408 of CALGreen, the Cal Poly Humboldt would implement a construction waste management plan for recycling and/or salvaging for reuse of a minimum of 65 percent of nonhazardous construction/demolition debris for the project. Additionally, Cal Poly Humboldt would be required to recycle a minimum of 50 percent of the waste generated by the buildings, per requirements for State agencies and entities by Assembly Bills 75 and 939. Therefore, solid waste from the project would be minimized to the maximum degree feasible, and the contribution to the cumulative impacts on capacity of solid waste facilities would not be cumulatively considerable.

Because future utility demands include development within the cumulative context, the analysis provided in Section 3.12, "Utilities and Service Systems," is considered inherently cumulative. As a result and based on the analysis provided above and in Section 3.12, the project would not make a cumulatively considerable contribution, and impacts would be **less than significant** with respect to utilities and service systems.

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