4.0 BASIS OF CUMULATIVE ANALYIS

This section of the Draft Environmental Impact Report (EIR) provides an overview of the California Environmental Quality Act (CEQA) requirements related to addressing cumulative impacts, the methodology for establishing the cumulative baseline, and a summary of the cumulative setting. Section 15355 of the State *CEQA Guidelines*, as amended, provides the following definition of cumulative impacts: "Cumulative impacts refer to two or more individual effects which, when considered together, are considerable, or which compound or increase other environmental impacts."

4.1 CEQA REQUIREMENTS

CEQA requires that EIRs analyze cumulative impacts. As defined in State *CEQA Guidelines* §15355, a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. State *CEQA Guidelines* §15130(a) states that an EIR must discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in State *CEQA Guidelines* §15065(a)(3). Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. However, an EIR should not discuss impacts which do not result in part from the project evaluated in the EIR. Furthermore, when the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR must briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. A lead agency must identify facts and analysis supporting the lead agency's conclusion that the cumulative impact is less than significant.

In addition, State *CEQA Guidelines* §15130(b) indicates that the analysis of cumulative impacts shall reflect the severity of the impacts and the likelihood of occurrence, but the discussion need not provide as great detailed as is provided for the effects attributable to the project alone. Instead, 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 the other projects which do not contribute to the cumulative impact.

As indicated above, "cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or compound or increase other environmental impacts." Cal. Pub. Res. Code §21083(b); State *CEQA Guidelines* §15355. A project has "cumulatively considerable" impacts when its incremental effects "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." Cal. Pub. Res. Code §21083(b); see also State *CEQA Guidelines* §15355(b).

4.2 CUMULATIVE IMPACT ANALYSIS METHODOLOGY

The analysis of cumulative impacts focuses on those effects that, when combined together with other similar activities or projects could result in a large enough effect or impact that would be considered cumulatively significant. If the individual project's contribution is substantial enough, it may be considered cumulatively significant. In some instances, a project-specific impact may not combine with effects from other activities, in which case, the project's contribution to a cumulative effect would be less than considerable.

For an adequate discussion of significant cumulative impacts, the *CEQA Guidelines* (§15130(b)(1)(A) and (B)) allow an environmental impact report to determine cumulative impacts and reasonably foreseeable growth based on either of the following methods:

- A list of past, present, and probable future projects producing related or cumulative impacts; or

- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental planning document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

Cumulative impact discussions for each environmental topic area are provided at the end of each technical analysis contained within Section 5.0, DESCRIPTION OF ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES, and uses a combination of both Method 1 and Method 2. The approach for each respective topical section of this Draft EIR is discussed below. The following discusses the related projects as used to analyze cumulative impacts under Method 1.

As previously stated, and as set forth in the State *CEQA Guidelines*, related projects consist of "closely related past, present, and reasonable foreseeable probable future projects that would likely result in similar impacts and are located in the same geographic area" (CCR, Title 14, Division 6, Chapter 3, §15355). Related projects and other possible development in the area determined as having a direct potential to interact with the proposed project (to the extent that a significant cumulative effect may occur) are identified in Table 4-1, CUMULATIVE PROJECTS CONSIDERED, below.

Table 4-1
CUMULATIVE PROJECTS CONSIDERED

Agency	Project Name	Use	Number of Units	Square Footage
City of Redding	River Crossing Specific Plan	Warehouse Retail Commercial Retail	-	222,250
City of Redding	Churn Creek Marketplace	Retail	-	143,225
Bureau of Indian Affairs	Rancheria Development	Retail/Commercial/Resort	250 (hotel rooms)	140,000 (casino)
City of Redding	K2 Downtown Redevelopment	Mixed Use	82	22,291
City of Redding	K2/McConnell Downtown Development	Mixed Use	220	25,000
California Administrative Office of the Courts	Downtown Courthouse	Public Facilities	-	165,296
City of Redding	Lowden Office Complex	Mixed Use	-	80,500
City of Redding	Cobblestone Shopping Center	Retail	-	126,735
City of Redding	Henderson-Parkview Open Space Restoration, Trail & Kayak Access	Restoration/Recreational	NA	NA
City of Redding	Cypress Avenue Bridge South Side Channel Habitat Project	Restoration	NA	NA

Note: Projects accounted for in the Draft EIR are based on the data available at the time of the City's release of the Notice of Preparation (NOP) in June 2018.

Source: City of Redding. 2018.

Although the projects listed above serve as the primary basis for evaluation of cumulative impacts, the approaches to these analyses vary for certain environmental issues. According to State *CEQA* Guidelines §15130 (b)(3), the City established a general geographic scope of the area affected by the potential cumulative effects based on the potential for the proposed project and related projects to contribute impacts within a particular distance from the project site, jurisdiction, viewshed, watershed, air basin,

service area, or other geography, as applicable. The specific geographic scope for each environmental issue analyzed in this EIR is provided below.

Aesthetics

The geographic extent of the cumulative impacts analysis for visual resources is the same as the extent of the regional setting, as described in Section 5.1, AESTHETICS. That extent is defined as the viewsheds from which the proposed project might be seen, including foreground, middleground, and background viewing distances. This geographic extent is appropriate as only those projects that can be viewed in the context of the proposed project could contribute to cumulative visual effects.

Air Quality

The geographic extent of the cumulative impacts analysis for air quality is the same as the extent of the regional setting, as described in Section 5.2, AIR QUALITY. That extent is defined as the Shasta County portion of the NSVAB. This represents the geographic limit for cumulative air quality since air emissions have a regional effect. The Shasta County portion of the NSVAB is designated as a nonattainment area for O_3 and PM_{10} for state standards. The Shasta County portion of the NSVAB is designated as being unclassified and/or attainment for all pollutants under federal standards.

Biological Resources

The geographic scope for cumulative impacts to biological resources includes past, present, and reasonably foreseeable projects within the surrounding area, as identified above in Table 4-1. Generally, the geographic extent of cumulative impacts on biological resources consists of the City of Redding, Shasta County, and the Central Valley region of California. This geographic context is appropriate because it supports similar biological resource values and functions to those of the project area.

Cultural Resources

The geographic scope for cumulative impacts to cultural resources includes past, present, and reasonably foreseeable projects as identified above in Table 4-1. This geographic limitation is appropriate as cultural resource impacts are generally localized, site specific and either individually impacted in a way that changes the significance of the resource or avoided.

Energy Consumption

The cumulative setting for energy use includes Shasta County and the incorporated cities of Redding, Anderson, and Shasta Lake, as described in Section 5.17, ENERGY CONSUMPTION. This geographic extent is appropriate as it represents the area served by Redding Electric Utility as well as the region where the majority of transportation fuel is consumed.

Geology and Soils

Development projects are analyzed on an individual basis and must comply with established requirements of the City of Redding and the California Building Standards Code as they pertain to protection against known geologic hazards and potential geologic and soil-related impacts. Analysis of cumulative impacts takes into consideration the entirety of impacts that the projects identified above in

Table 4-1, would have on geologic resources. This geographic extent is appropriate as geology and soil-related impacts are generally site-specific and are determined by a particular site's soil characteristics, topography, and proposed land uses.

Greenhouse Gases and Climate Change

The geographic extent of the cumulative impacts analysis for greenhouse gas (GHG) emissions are the same as the extent of the regional setting, as described in Section 5.2, AIR QUALITY. That extent is defined as the Shasta County portion of the NSVAB as well as the State of California. Although GHG emissions have a global effect, this represents the geographic limit for cumulative GHG emissions since the focus of this analysis is compliance with State and regional GHG emission reduction targets.

Hazards and Hazardous Materials

The health and safety hazards posed by most hazardous materials are typically local in nature. They generally do not combine in any cumulative sense with the hazards of other projects. Possible exceptions, however, include potential transportation of hazardous materials and waste disposal. The geographic scope for cumulative impacts to hazards and hazardous materials encompasses the projects included in Table 4-1, and development within the City and unincorporated Shasta County. For the transport of hazardous materials the geographic scope of cumulative impacts considers local roadways that include Cypress Avenue and Hartnell Avenue and the regional facilities of Interstate 5, SR-299, SR-273, and SR-44 within Shasta County. This geographic scope of analysis is appropriate because of influence of the area with wildfires, as well as the localized nature of hazardous materials impacts and other hazards discussed in this section.

Hydrology and Water Quality

The geographic area considered for cumulative impacts to surface water, drainage, and flood hazards encompasses the Lower Sacramento Watershed, which spans about 20,125 square miles, including the Sacramento Valley, the northern Sierra Nevada, the south end of the Cascade Range, and some of the east slopes of the northern Coast Ranges. The area considered for cumulative water quality impacts covers the nine cities and towns (including Redding) and four counties within the six-county northern and central Sacramento Valley region that are permittees on the Small MS4 General Permit. These defined geographic areas are appropriate as cumulative development may adversely affect downstream water quality and flood hazards.

The geographic area considered for cumulative impacts to groundwater includes the Redding Groundwater Basin. This geographic extend is appropriate as the cumulative groundwater impacts are generally limited to the groundwater basin in which cumulative development would occur.

Land Use and Planning

The geographic scope for cumulative impacts related to land use includes closely related past, present, and reasonably foreseeable future projects located in the surrounding area. The area influenced by cumulative land use effects related to adjacent parcels and the surrounding planned development areas is described in Table 4-1. Related land use projects in the surrounding areas have been: 1) submitted for plan processing; 2) approved by the City of Redding; and/or 3) engaged in active construction programs. This geographic extent is appropriate as land use impacts are generally localized and individual impacts of any future projects would be addressed on a project-by-project basis.

Noise

The geographic extent of the cumulative setting for stationary noise sources consists of the project area and the surrounding areas within the City, since noise is a localized phenomenon. Relative to transportation-related noise sources, the cumulative setting includes Bechelli Lane, Cypress Avenue, Hartnell Avenue, and Henderson Road. These roadways are consistent with primary roadways addressed in the project's traffic impact analysis report, including the cumulative traffic modeling projections for *Year 2040*.

Population and Housing

The geographic scope for population, housing, and employment includes approved and proposed development in the region as well as development anticipated by the City of Redding and Shasta County as identified in their respective general plans. Regional population, housing, and employment demographics are detailed in Section 5.11, POPULATION AND HOUSING. This geographic extent is appropriate to provide an assessment of population, housing, and employment in comparison of local and regional growth forecasts, which also accounts for planned or reasonably foreseeable development within the City and County.

Public Services

The geographic areas considered for cumulative impacts are the respective services areas of the City of Redding, Redding Fire Department and Redding Police Department, including the geographic area covered by SHASCOM, the Shasta Unified High School District and the Enterprise Elementary School District. This geographic extent is appropriate as service providers are responsible for ensuring adequate provision of public services within their service area boundaries.

Recreation

The geographic scope for cumulative impacts to recreation is the City of Redding corporate limits which includes the recreational facilities covered under the *Parks, Trails, & Open Space Master Plan*. This geographic extent is appropriate as population growth, including growth that would occur with the projects identified in Table 4-1 in Section 4.0, BASIS OF CUMULATIVE ANALYSIS, would potentially utilize City-wide recreational facilities.

Traffic and Circulation

The cumulative setting for traffic and circulation consists of traffic generated by all existing and future (cumulative) development in the project area including buildout of the City and County general plan land uses under *Year 2040* conditions. This geographic extent is appropriate for the cumulative analysis as it captures all of the roadways and intersections considered in the traffic analysis for the proposed project which includes an evaluation of long-term traffic conditions based on traffic volumes contained in Shasta County's county-wide transportation demand model for *Year 2040*.

Tribal Cultural Resources

The geographic scope for cumulative impacts to TCRs includes past, present, and reasonably foreseeable projects as identified in Table 4-1, above. This geographic limitation is appropriate as TCR impacts are

generally localized, site specific and either individually impacted in a way that changes the significance of the resource or avoided.

Utilities and Service Systems

The cumulative setting for wastewater, water supply, and solid waste services is provided below. The geographic context for wastewater, water supply, and solid waste services is the establish service area of the utility purveyor or service provider. This geographic extent is appropriate because increases in demand are generally limited to the service area of the utility purveyor or service provider. If constructed, the proposed project, combined with other past, present, and reasonably foreseeable future development, could potentially contribute to cumulatively considerable burdens on the following utilities and service systems:

Wastewater. The cumulative setting for wastewater is the Clear Creek Basin Collection Area serviced by the Clear Creek WWTP as identified in the City of Redding's *Wastewater Utility Master Plan*. The Clear Creek Collection Basin Collection Area is comprised of the areas west of the Sacramento River, the western portion of the Enterprise area, and areas served upstream of the North Market Street Lift Station.

Water Supply. The cumulative setting for water supply includes the City of Redding's 58-square-mile water service area covered within the *2015 Urban Water Management Plan*. The water service area includes the City and the proposed project, as well as the previously unincorporated areas of Buckeye, Twin View, and Quartz Hill. Additionally, the geographic area considered for cumulative impacts to groundwater includes the Redding Groundwater Basin. This geographic extend is appropriate as the cumulative groundwater impacts are generally limited to the groundwater basin in which cumulative development would occur. Projects identified in Table 4-1, above, would likely use, in part, groundwater resources of the Redding Groundwater Basin.

Solid Waste. The cumulative setting for solid waste service includes the City of Redding's service area and solid waste transported and disposed at the Richard W. Curry/West Central Sanitary Landfill, as well as portions of Shasta County, Anderson, and Shasta Lake, all of which also transport waste to the Richard W. Curry/West Central Sanitary Landfill.