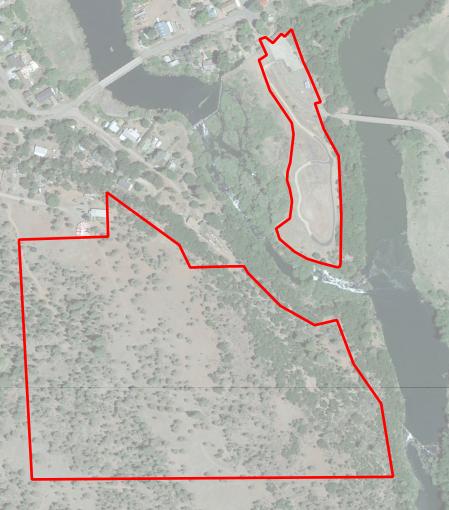
PROPOSED MITIGATED NEGATIVE DECLARATION AND INITIAL STUDY

Fall River Valley Community Services District
Two Rivers Park Project



Prepared for:

Fall River Valley Community Services District

October 2021

546-04

ENPLAN

3179 Bechelli Lane Suite 100 Redding, GA 96002

PROPOSED MITIGATED NEGATIVE DECLARATION

LEAD AGENCY:	Fall River Valley Community Services District		
PROJECT PROPONENT:	Fall River Valley Community Services District		
PROJECT NAME:	Two Rivers Park Project		
STATE CLEARINGHOUSE NO.	xxxxxxxx		
LOCATION:	As shown in Figure 1 of the Initial Study, the project site is located within the unincorporated community of Fall River Mills in Shasta County at the confluence of the Pit and Fall Rivers. As shown in Figure 2 , improvements would occur on both the east and west sides of the Fall River. Improvements on the east side of the river would occur generally south of Bridge Street, on both sides of Main Street, and southwest of Cassel-Fall River Road. Improvements on the west side of the river would occur generally south of Bridge Street and west of Grand Rapids Avenue.		
	The project is in Section 31, Township 37N, Range 5E, of the U.S. Geological Survey's (USGS) Fall River Mills 7.5' quadrangle. Assessor's Parcel Numbers: 018-540-013, 018-540-021, 018-540-023, 018-550-003, and 032-270-001; and Shasta County road right-of-way. Latitude 41°00'01.00"N, Longitude 121°26'14.43"W (centroid)		
PROJECT SUMMARY:	The Fall River Valley Community Services District (FRVCSD) acquired fee title from Pacific Gas and Electric Company of approximately 35 acres of land for the development of a community park. FRVCSD began construction of the first phase of park improvements in 2020, which included installation of a parking area, decomposed granite trails, and various landscaping amenities, and demolition and removal of existing structures.		
	The proposed project includes construction of additional park facilities and community trails. The majority of improvements would occur within the park on the east side of the Fall River. Improvements on the west side of the Fall River would be limited to community trails and a parking lot as described below.		
	Improvements on the east side include:		
	Pave Segment of Existing Trail: A ±400-foot segment of the existing unpaved trail starting at Main Street/Cassel-Fall River Road would be paved.		
	 Park Pavilion: A picnic area with a pavilion would be constructed at the northernmost end of the park. It is estimated that the pavilion would be ±600 square feet. Solar panels would be mounted on top of the pavilion and an Americans with Disabilities Act (ADA) accessible drinking fountair would be installed. 		
	Miscellaneous Park Facilities: Benches, picnic tables, signage, and recycle waste stations would be installed at various locations throughout the park. An information kiosk and a gate with a decorative archway would be installed. An ADA accessible restroom would be constructed adjacent to the existing parking lot. The restroom would be ±450 square feet.		
	Landscaping: Landscaping improvements, including trees, shrubs, and mulch would be located throughout the park. All landscaping would be drought tolerant and no irrigation would be required.		

Improvements on the west side include:

 Community Trails and Parking Lot: Approximately 4,000 linear feet of community trails would be constructed southwest of the river confluence. The trails would be four feet in width and have a permeable surface. A paved access road and unpaved parking lot would be constructed ±150 feet from the end of Grand Rapids Avenue and a gate, signage, and a recycle waste station would be installed.

FINDINGS / DETERMINATION

As documented in the Initial Study, project implementation could result in temporarily increased air emissions, impacts on special-status plants (if present), disturbance of nesting birds (if present), indirect impacts on wetlands and other waters of the U.S./State, the introduction and spread of noxious weeds during construction, impacts on cultural and tribal cultural resources (if present), impacts on paleontological resources (if present), and temporarily increased noise and vibration levels.

Design features incorporated into the project would avoid or reduce certain potential environmental impacts, as would compliance with existing regulations and permit conditions. Remaining impacts can be reduced to levels that are less than significant through implementation of the mitigation measures presented in Section 1.10 of the Initial Study. Because the District will adopt mitigation measures as conditions of project approval and will be responsible for ensuring their implementation, it has been determined that the project will not have a significant adverse impact on the environment.

Final Mitigated Negative Declaration approve Valley Community Services District on	ed by the Board of Directors of the Fall River , 2021 by Resolution

DRAFT INITIAL STUDY

SCH#XXXXXXXX

Two Rivers Park Project

FALL RIVER VALLEY COMMUNITY SERVICES DISTRICT

LEAD AGENCY:



Fall River Valley Community Services District 24850 3rd Street
Fall River Mills, CA 96028
530.336.5263

PREPARED BY:



3179 Bechelli Lane, Suite 100 Redding, CA 96002 **530.221.0440**

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SECTION 1.0 INTRODUCTION

1.1 PROJECT SUMMARY

Project Title:	Two Rivers Park Project
Applicant:	Fall River Valley Community Services District Representative: Amber Beck
Lead Agency Name and Address:	Fall River Valley Community Services District 24850 3rd Street Fall River Mills, CA 96028
Contact Person and Phone Number:	Amber Beck, Office and Parks Manager amber@frvcsd.org 530.336.5263
District's Environmental Consultant:	ENPLAN 3179 Bechelli Lane, Suite 100 Redding, CA 96002

1.2 PURPOSE OF STUDY

The Fall River Valley Community Services District (District), as Lead Agency, has prepared this Initial Study to provide the general public and interested public agencies with information about the potential environmental impacts of the proposed Two Rivers Park project (project). Details on the project are included in Section 3.0 (Project Description).

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 (as amended), codified in California Public Resources Code §21000 et seq., and the State CEQA Guidelines in the Code of Regulations, Title 14, Division 6, Chapter 3. Pursuant to these regulations, this Initial Study identifies potentially significant impacts and, where applicable, includes mitigation measures that would reduce all identified environmental impacts to less-than-significant levels. This Initial Study supports a Mitigated Negative Declaration (MND) pursuant to CEQA Guidelines §15070.

1.3 EVALUATION TERMINOLOGY

The environmental analysis in Section 4.0 is patterned after the Initial Study Checklist recommended in the State CEQA Guidelines. For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the proposed project. To each question, there are four possible responses:

- No Impact. The proposed project will not have any measurable environmental impact on the
 environment.
- **Less-Than-Significant Impact.** The proposed project has the potential to impact the environment; however, this impact will be below established thresholds of significance.
- Potentially Significant Impact Unless Mitigation Incorporated. The proposed project has the
 potential to generate impacts which may be considered a significant effect on the environment;
 however, mitigation measures or changes to the proposed project's physical or operational
 characteristics can reduce these impacts to levels that are less than significant.

• **Potentially Significant Impact**. The proposed project will have significant impacts on the environment, and additional analysis is required to determine if it is feasible to adopt mitigation measures or project alternatives to reduce these impacts to less than significant levels.

1.4 ORGANIZATION OF THE INITIAL STUDY

This document is organized into the following sections:

Section 1.0: Introduction: Describes the purpose, contents, and organization of the document

and provides a summary of the proposed project.

Section 2.0: CEQA Determination: Identifies the determination of whether impacts associated

with development of the proposed project are significant, and what, if any, additional

environmental documentation may be required.

Section 3.0: Project Description: Includes a detailed description of the proposed project.

Section 4.0: Environmental Impact Analysis (Checklist): Contains the Environmental Checklist

from CEQA Guidelines Appendix G with a discussion of potential environmental effects associated with the proposed project. Mitigation measures, if necessary, are

noted following each impact discussion.

Section 5.0: List of Preparers

Section 6.0: Abbreviations and Acronyms

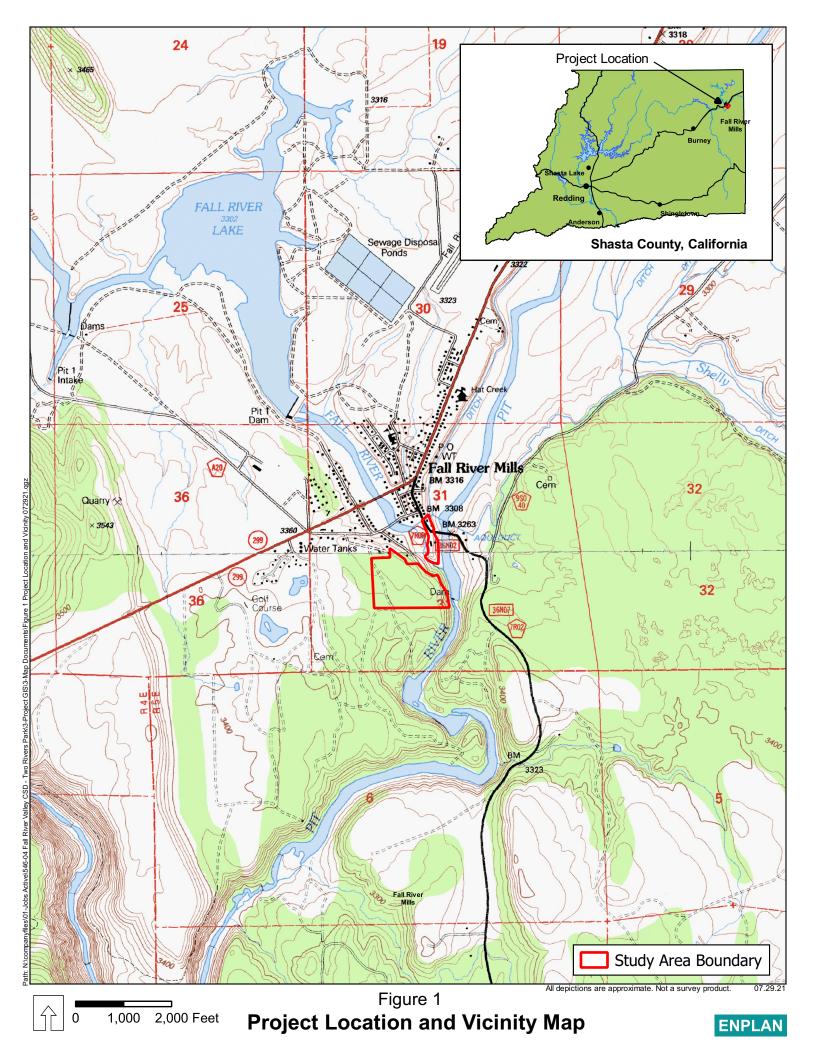
Appendices: Contains information to supplement Section 4.0.

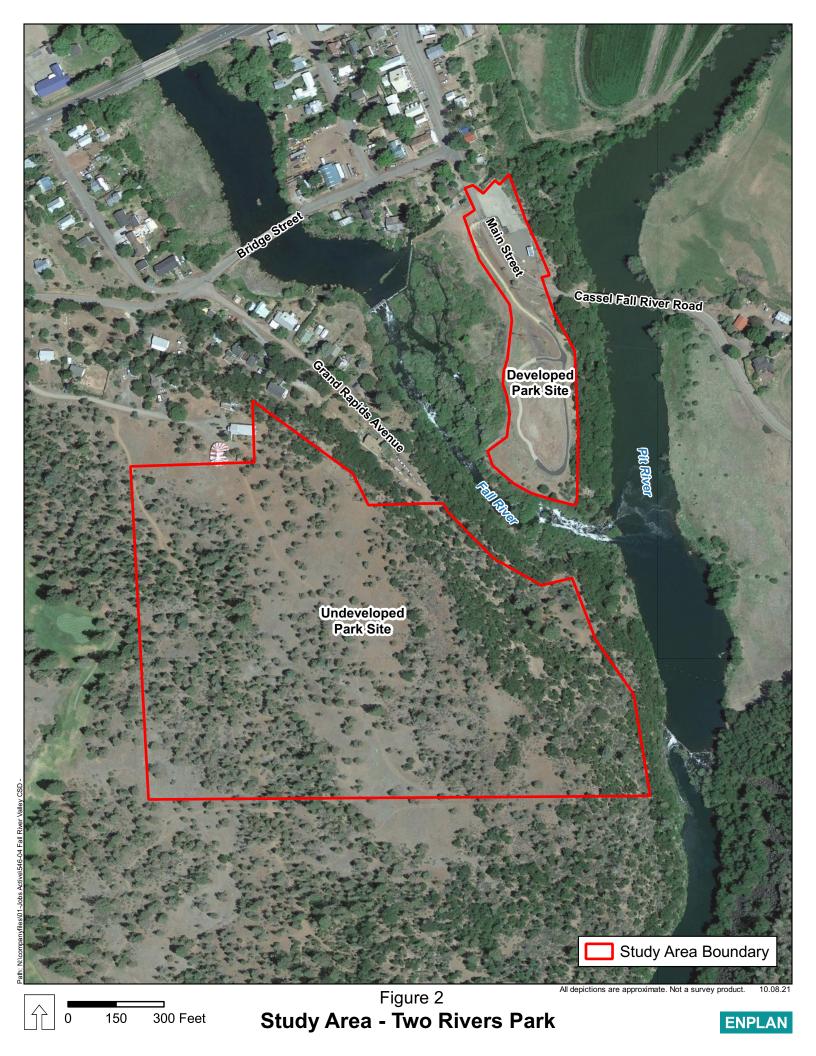
1.5 PROJECT LOCATION

Project Location:

As shown in **Figure 1**, the project site is located within the unincorporated community of Fall River Mills in Shasta County at the confluence of the Pit and Fall Rivers. As shown in **Figure 2**, improvements would occur on both the east and west sides of the Fall River. Improvements on the east side of the river would occur generally south of Bridge Street, on both sides of Main Street, and southwest of Cassel-Fall River Road. Improvements on the west side of the river would occur generally south of Bridge Street and west of Grand Rapids Avenue.

The project is in Section 31, Township 37N, Range 5E, of the U.S. Geological Survey's (USGS) Fall River Mills 7.5' quadrangle, and includes all or portions of Assessor's Parcel Numbers: 018-540-013, 018-540-021, 018-540-022, 018-540-023, 018-550-003, and 032-270-001; and Shasta County Right-of-Way. Latitude 41°00'01.00" N, Longitude 121°26'14.43"W (centroid)





1.6 ENVIRONMENTAL SETTING

General Plan	Undeveloped Park Site: Open Space (N-O)		
Designation:	Developed Park Site: Agricultural Croplands (AC) and Commercial (C)		
Zoning:	Undeveloped Park Site: Open Space (OS)		
	Developed Park Site: Open Space (OS), Commercial-Light Industrial (CM)		
Surrounding Land Uses:	Land uses south/southwest of the project area include a golf course and undeveloped open space. Parcels to the north on Bridge Street and along Grand Rapids Avenue are developed with single-family residences. Parcels to the east are a variety of agricultural uses and low-density residential uses related to agricultural operations. Parcels north of Bridge Street are a collection of residential, commercial and public facilities making up downtown Fall River Mills along Main Street.		
Topography:	The western portion of the project site is located at an elevation of ±3,360 feet above mean sea level. The property slopes gently to the east to the upper bank of the Fall and Pit River confluence, then the bank significantly slopes into the river.		
	The eastern portion of the project site is located at an elevation of ±3,260 feet above mean sea level. The property is flat then progressively slopes to the east and southeast toward the Pit River.		
Soils:	According to the U.S. Department of Agriculture, Natural Resources Conservation Service, three soil units have been mapped in the project site: Jellycamp-Lassen-Longcreek complex, 2 to 15 percent slopes; Pittville sandy loam, 0 to 5 percent slopes; and Pittville sandy loam, 15 to 30 percent slopes.		
Natural Communities/ Wildlife Habitats:	Habitat types in the study area include riverine, grasslands, and mixed-conifer/oak woodland. Riverine habitat includes the Fall River and Pit River that are part of the Upper Pit River Watershed. Representative aquatic species in the rivers include hardhead, Pit sculpin, Sacramento sucker, Sacramento pikeminnow, rainbow trout, brown trout, tule perch, tui chub, and speckled dace. The grassland community includes perennial grasslands, sagebrush, bitterbrush, mountain mahogany, and juniper woodlands. The mixed-conifer/oak woodland community is represented by ponderosa pine, juniper, and various oak species. See Section 4.4 (<i>Biological Resources</i>).		
Climate:	The study area is characterized by mild, cool, and dry winters and arid, hot summers. The average annual rainfall is ±18.15 inches. Temperatures range between an average January low of 20.7 degrees Fahrenheit (°F) and an average July high of 87.6 °F.		

1.7 REQUIRED PERMITS AND APPROVALS

Permits and approvals that may be necessary for the construction and operation of the proposed project are identified below:

Fall River Valley Community Services District

- Adoption of a Mitigated Negative Declaration for the project pursuant to the California Environmental Quality Act (CEQA).
- Adoption of a Mitigation Monitoring and Reporting Program for the project that incorporates the mitigation measures identified in this Initial Study.

Shasta Land Trust

Approval of construction and improvement plans in accordance with the final *Deed of Conservation Easement Limiting Owners' Use* between the Fall River Valley Community Services District and the Shasta Land Trust.

Shasta County

- Approval of a Grading Permit in accordance with County Code Chapter 12.12 (Grading, Excavation, and Filling).
- Approval of a Building Permit in accordance with County Code Title 16 (Buildings and Construction).
- Approval of an Encroachment Permit in accordance with County Code Chapter 12.08 (Encroachments) for work in the County road right-of-way.

U.S. Army Corps of Engineers

• If work would result in the discharge of dredged or fill material into wetlands or other waters of the U.S., Section 404 Permit under the Federal Clean Water Act.

State Water Resources Control Board (SWRCB)/Central Valley Regional Water Quality Control Board (CVRWQCB)

- If the project disturbs one acre or more of soil, or if the project disturbs less than one acre
 but is part of a larger common plan of development that in total disturbs one or more
 acres, coverage under the NPDES permit for *Discharges of Storm Water Runoff Associated with Construction Activity* (currently Order No. 2009-009-DWQ, as
 amended). Permit coverage may be obtained by submitting a Notice of Intent to the
 SWRCB. The permitting process requires the development and implementation of an
 effective Strom Water Pollution Prevention Plan (SWPPP) that includes Best
 Management Practices (BMPs) to reduce pollutants and any additional controls
 necessary to meet water quality standards.
- If work would result in the discharge of dredged of fill material into wetlands or other waters of the U.S. and/or State), Section 401 Water Quality Certification (or waiver) and Report of Waste Discharge

1.8 TRIBAL CULTURAL RESOURCES CONSULTATION

Public Resources Code §21084.2 (AB 52, 2014) establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resources is a project that may have a significant effect on the environment." In order to determine whether a

project may have such an effect, a lead agency is required to consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.

The Pit River Nation requested notification of projects under the jurisdiction of the FRVCSD. Project information was hand-delivered to the tribe on September 7, 2021, and the Ajumawi Band of the Pit River Nation requested consultation on the proposed project. See Section 4.5 (Cultural Resources) and Section 4.18 (Tribal Cultural Resources) for a discussion regarding Native American outreach and consultation.

1.9 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the proposed project, involving at least one impact requiring mitigation to bring it to a less-than-significant level. Impacts to these resources are evaluated using the checklist included in Section 4.0. The proposed project was determined to have a less-than-significant impact or no impact without mitigation on unchecked resource areas.

	Aesthetics		Greenhouse Gas Emissions		Public Services
	Agricultural and Forestry Resources	\boxtimes	Hazards/Hazardous Materials		Recreation
\boxtimes	Air Quality	\boxtimes	Hydrology and Water Quality		Transportation
\boxtimes	Biological Resources		Land Use and Planning	\boxtimes	Tribal Cultural Resources
\boxtimes	Cultural Resources		Mineral Resources		Utilities and Service Systems
\boxtimes	Energy		Noise		Wildfire
\boxtimes	Geology and Soils		Population and Housing	\boxtimes	Mandatory Findings of Significance

1.10 SUMMARY OF MITIGATION MEASURES

The following mitigation measures are proposed to reduce impacts of the proposed project to less-thansignificant levels.

AIR QUALITY

MM 4.3.1 The following measures shall be implemented throughout construction:

- a. All material excavated, stockpiled, or graded shall be covered or sufficiently watered to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of ambient air quality standards. Watering shall occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day.
- b. All material transported offsite shall be either sufficiently watered or securely covered to prevent a public nuisance.
- c. All areas (other than paved roads) with vehicle traffic shall be watered periodically or have dust palliatives applied for stabilization of dust emissions.
- d. All on-site vehicles shall be limited to a speed of 15 miles per hour on unpaved roads.

- e. All land clearing, grading, earth moving, and excavation activities on the project site shall be suspended when winds are causing excessive dust generation.
- f. All trucks hauling dirt, sand, soil, or other loose materials shall be covered or shall maintain at least two feet of free board in accordance with the requirements of Section 23114 of the California Vehicle Code. This provision is enforced by local law enforcement agencies.
- g. Paved streets in and adjacent to the construction site shall be swept or washed at the end of the day to remove excessive accumulations of silt and/or mud resulting from activities on the development site.
- h. When not in use, motorized construction equipment shall not be left idling for more than five minutes.
- **MM 4.3.2** In order to minimize fugitive dust emissions, all unpaved areas with vehicular traffic (e.g., the new parking area and/or access road for the undeveloped park) shall be covered with coarse aggregate base no smaller than 20 millimeters. The gravel shall be maintained, and gravel shall be added/replaced as needed.
- MM 4.3.3 In unpaved areas with vehicular traffic (e.g., the new parking area and/or access road for the undeveloped park) that are on the District's property, the District shall post signs that limit vehicle speed to 15 miles per hour. If approved by Shasta County, such signs shall be placed along unpaved areas in the County's road right-of-way of Grand Rapids Avenue.

BIOLOGICAL RESOURCES

MM 4.4.1 Prior to commencement of any earth disturbance (e.g., clearing, grading, trenching, etc.), a botanical survey of the undeveloped park site shall be conducted by a qualified biologist during the blooming period when special-status plants would be identifiable. The survey shall cover all areas in which improvements would occur, plus a suitable distance from the work areas to identify any special-status species that could be indirectly impacted by the project. In the event that special-status plant species are present, a suitable buffer zone(s) shall be determined by a qualified biologist in consultation with the applicable regulatory agency. High-visibility fencing, flagging, or other markers shall be placed along the outer edge of the buffer area to prevent accidental entry.

If avoidance is not possible, the Fall River Valley Community Services District shall consult with the applicable regulatory agency to determine a satisfactory method of mitigation. Typical mitigation includes collecting and propagating seeds, and replanting the seedlings in a protected area, or transplanting the individual plants to a protected area. A detailed mitigation plan shall be submitted to the applicable regulatory agency for review and approval. The plan shall identify the mitigation site, methods to be employed to create offsetting special-status plant habitat, success criteria, monitoring requirements, remedial measures, and/or other pertinent data to ensure successful replacement of the affected plant populations. Mitigation shall be undertaken concurrently with or in advance of the start of project construction.

- MM 4.4.2 In order to avoid impacts to nesting birds and raptors protected under the federal Migratory Bird Treaty Act and California Fish and Game Code §3503 and §3503.5, including their nests and eggs, one of the following shall be implemented:
 - a. Vegetation removal and other ground-disturbance activities associated with construction shall occur between September 1 and January 31 when birds are not nesting; or
 - b. If vegetation removal or ground disturbance activities occur during the nesting season, a pre-construction nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area.

Surveys shall begin prior to sunrise and continue until vegetation and nests have been sufficiently observed. The survey shall consider acoustic impacts and line-of-sight disturbances occurring as a result of the project in order to determine a sufficient survey radius to avoid nesting birds. At a minimum, the survey report shall include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed in the area, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.).

The results of the survey shall be submitted electronically to the California Department of Fish and Wildlife upon completion at: **R1CEQARedding@wildlife.ca.gov**. The survey shall be conducted no more than one week prior to the initiation of construction. If construction activities are delayed or suspended for more than one week after the preconstruction survey, the site shall be resurveyed.

If active nests are found, the applicant shall consult with CDFW and/or the USFWS regarding appropriate actions needed to comply with the Migratory Bird Treaty Act and California Fish and Game Code §3503. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists.

- MM 4.4.3 Prior to commencement of any earth disturbance in the developed park (e.g., clearing, grading, trenching, etc.), high-visibility exclusionary fencing, flagging, or other markers shall be installed along the outer edges of wetlands and other waters of the U.S. and/or State that abut or approach construction areas. Fencing locations shall be determined by a qualified biologist in consultation with District staff. No construction activities (e.g., clearing, grading, trenching, etc.), including vehicle parking and materials stockpiling, shall occur within the fenced areas. The exclusionary fencing shall be periodically inspected by a qualified biologist throughout project construction to ensure the fencing is properly maintained. The fencing shall be removed upon project completion.
- **MM 4.4.4** The potential for introduction and spread of noxious weeds shall be avoided/minimized by:
 - a. Using only certified weed-free erosion control materials, mulch, and seed.
 - b. Limiting any import or export of fill material to material that is known to be weed free.
 - Requiring the construction contractor to thoroughly wash all equipment at a commercial
 wash facility prior to entering the job site and upon leaving the job site.

CULTURAL RESOURCES

- MM 4.5.1 In the event of any inadvertent discovery of cultural resources (i.e., burnt animal bone, midden soils, projectile points or other humanly-modified lithics, historic artifacts, etc.), all work within 50 feet of the find shall be halted until a professional archaeologist can evaluate the significance of the find in accordance with PRC §21083.2(g) and §21084.1, and CEQA Guidelines §15064.5(a). If any find is determined to be significant by the archaeologist, the District shall meet with the archaeologist to determine the appropriate course of action. If necessary, a Treatment Plan prepared by an archeologist outlining recovery of the resource, analysis, and reporting of the find shall be prepared. The Treatment Plan shall be reviewed and approved by the District prior to resuming construction.
- **MM 4.5.2** Prior to any ground-disturbing activities (e.g., clearing, grading, trenching, etc.) in the undeveloped park, the final site/design plan for the undeveloped park improvements shall be reviewed by a qualified archaeologist to ensure complete avoidance of known significant cultural resources.

- **MM 4.5.3** Prior to any ground-disturbing activities (e.g., clearing, grading, trenching, etc.) in the undeveloped park, the Fall River Valley Community Services District shall request that the Ajumawi Band of the Pit River Nation review the final site/design plan to ensure complete avoidance of significant tribal cultural resources.
- MM 4.5.4 A minimum of two weeks in advance of any ground-disturbing activities in either the developed or undeveloped park (e.g., clearing, grading, trenching, etc.), the Tribal Historic Preservation Officer of the Pit River Nation shall be notified and offered the opportunity for a Native American representative to monitor ground-disturbing activities.
- MM 4.5.5 In the event that cultural resources or human remains of Native American descent are identified during earth disturbance, the Ajumawi Band shall be requested to provide a Native American monitor to observe subsequent earth-disturbing construction activities on potentially sensitive lands.
- MM 4.5.6 In the event that human remains are encountered during construction activities, the District shall comply with §15064.5 (e) (1) of the CEQA Guidelines and PRC §7050.5. All project-related ground disturbance within 100 feet of the find shall be halted until the County coroner has been notified. If the coroner determines that the remains are Native American, the coroner will notify the NAHC to identify the most likely descendants of the deceased Native Americans. Project-related ground disturbance in the vicinity of the find shall not resume until the process detailed in §15064.5 (e) has been completed.

ENERGY

Implementation of MM 4.3.1(h).

GEOLOGY AND SOILS

MM 4.7.1 If paleontological resources (fossils) are discovered during construction, all work within 50 feet of the find shall be halted until a professional paleontologist can evaluate the significance of the find. If any find is determined to be significant by the paleontologist, the District shall meet with the paleontologist to determine the appropriate course of action. If necessary, a Treatment Plan prepared by a paleontologist outlining recovery of the resource, analysis, and reporting of the find shall be prepared. The Treatment Plan shall be reviewed and approved by the District prior to resuming construction.

HAZARDS AND HAZARDOUS WASTE

MM 4.9.1 If, in the course of excavation or other construction activities, any signs of residual petroleum and other soil contamination (e.g., stained, discolored, or odorous soil) are uncovered, discovered, or otherwise detected or observed, construction activities in the affected area shall cease, and the Fall River Valley Community Services District General Manager shall be immediately contacted.

The District Manager, in consultation with the Shasta County Environmental Health Department (SCEHD) and Central Valley Regional Water Quality Control Board (CVRWQCB), shall advise the contractor of the appropriate measures for containment, testing, and removal of the suspect material, in accordance with federal, State and local laws and regulations. Construction work in the affected area shall not resume until the District Manager, in consultation with the SCEHD and/or CVRWQCB, has determined that all required corrective measures have been satisfied.

NOISE

Implementation of MM 4.3.1(h).

- **MM 4.13.1** Construction activities shall be limited to between the hours of 7:00 a.m. and 5:00 p.m. Exceptions to these limitations may be approved by the District Director or their designee for activities that require interruption of utility services to allow work during low demand periods, or to alleviate traffic congestion and safety hazards.
- **MM 4.13.2** Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- **MM 4.13.3** Stationary construction equipment (generators, compressors, etc.) shall be located at the farthest practical distance from nearby noise-sensitive land uses.

TRIBAL CULTURAL RESOURCES

Implementation of MM 4.5.3 through MM 4.5.6.

SECTION 2.0 CEQA DETERMINATION On the basis of this initial evaluation: I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. \boxtimes I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION has been prepared. П I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. I find that the proposed project MAY have a significant effect(s) on the environment, but at least \Box one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT Is required, but it must analyze only the effects that remain to be addressed. \Box I find that although the proposed project could have a significant effect on the environment. because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Amber Beck	
Amber Beck	
Office and Parks Manager	

10/12/2021

Office and Parks Manager

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT BACKGROUND, COMPONENTS, AND OBJECTIVES

The Fall River Valley Community Services District (FRVCSD) acquired approximately 35 acres from Pacific Gas and Electric Company (PG&E) in 2018 for development of the Community Center Park project. The acquired lands were designated for fee title donation by PG&E. FRVCSD is proposing phased development of the park to allow refinement of conceptual plans, provide for flexibility in implementation, and to effectively manage financial resources.

The first phase of the park development included the removal of structures and buildings not safe for redevelopment, removal of non-native plants, construction of an 18-car parking lot, development of a decomposed granite and partially paved trail from the parking lot to a viewing area of the falls on the east bank of the Fall River, and re-vegetation of disturbed areas with 500 native plants and at least 20 trees. An Initial Study for the Phase I improvements was prepared and a Negative Declaration was adopted in 2013. Phase 1 park improvements were funded and completed in early 2020.

FRVCSD has acquired additional funding from the Proposition 68 (Prop 68) Per Capita and Green Infrastructure Grant program to begin planning and constructing the second phase of park improvements. CEQA compliance, through the adoption of a Notice of Exemption (NOE) or Notice of Determination (NOD), is required to obtain funding from the Prop 68 programs. Proposed improvements are described in Section 3.2 (Project Components/Physical Improvements).

The total project site is ±35 acres and is comprised of parcels under FRVCSD and PG&E ownership, as well as County street right-of-way (ROW). As shown in **Figure 2**, the project site is separated into two distinct park areas. For purposes of this evaluation, the "developed park" is the ±4 acres adjacent to Main Street and Cassel Fall River Road on the peninsula of the confluence of the Fall and Pit Rivers. The "undeveloped park" is ±31 acres adjacent to Grand Rapids Avenue southwest of the Fall and Pit River confluence. The "study area" includes the entire 35-acres. The "development site" is smaller and confined to the areas that will be improved through this project.

With the exception of ±0.35 acres in the developed park area, the project site is subject to the provisions of a conservation easement that was recorded at the time the PG&E property was deeded to the FRVCSD. Shasta Land Trust, a non-profit corporation, holds the conservation easement and is responsible for enforcing restrictions included in the easement.

The purpose of the conservation easement is to protect natural habitats, preserve open space, provide for outdoor recreation by the general public, allow for sustainable forestry, and protect historic values in the area in perpetuity. The easement includes different allowable uses and restrictions for the developed and undeveloped park areas to ensure that uses of the site do not significantly impair the conservation values of the property.

3.2 PROJECT COMPONENTS/PHYSICAL IMPROVEMENTS

The project includes construction of additional park facilities and community trails as described below.

Developed Park Improvements

As shown in Figure 3.2-1, proposed improvements in the developed park include:

ADA Trail Improvement

A ±400-foot segment of the existing unpaved trail starting at Main Street/Cassel-Fall River Road would be paved.

Park Pavilion

A picnic area with a pavilion would be built in the developed park area at the north end of the existing trail loop. It is anticipated that the pavilion would be ±600 square feet. An Americans with Disabilities Act (ADA) accessible drinking fountain would be installed, and solar panels would be mounted on top of the pavilion to provide power for the water fountain pump and potentially the new public restroom discussed below.

Miscellaneous Park Facilities

Benches, picnic tables, signage, and recycle waste stations would be installed at various locations throughout the eastern park area. An information kiosk and a gate with a decorative archway would be installed. An ADA accessible public restroom would be constructed adjacent to the existing parking lot. The restroom would be ±450 square feet.

Landscaping

Landscaping improvements would be installed throughout the park. The landscaping will include native and culturally significant species identified by tribal representatives from the Ajumawi Band of the Pit River Nation. All landscaping would be a mixture of trees, shrubs, and groundcover to mimic natural landscapes of the region. The landscaped areas will not be irrigated; therefore, no water usage for landscaping is anticipated outside of the initial planting schedule.

Undeveloped Park Improvements

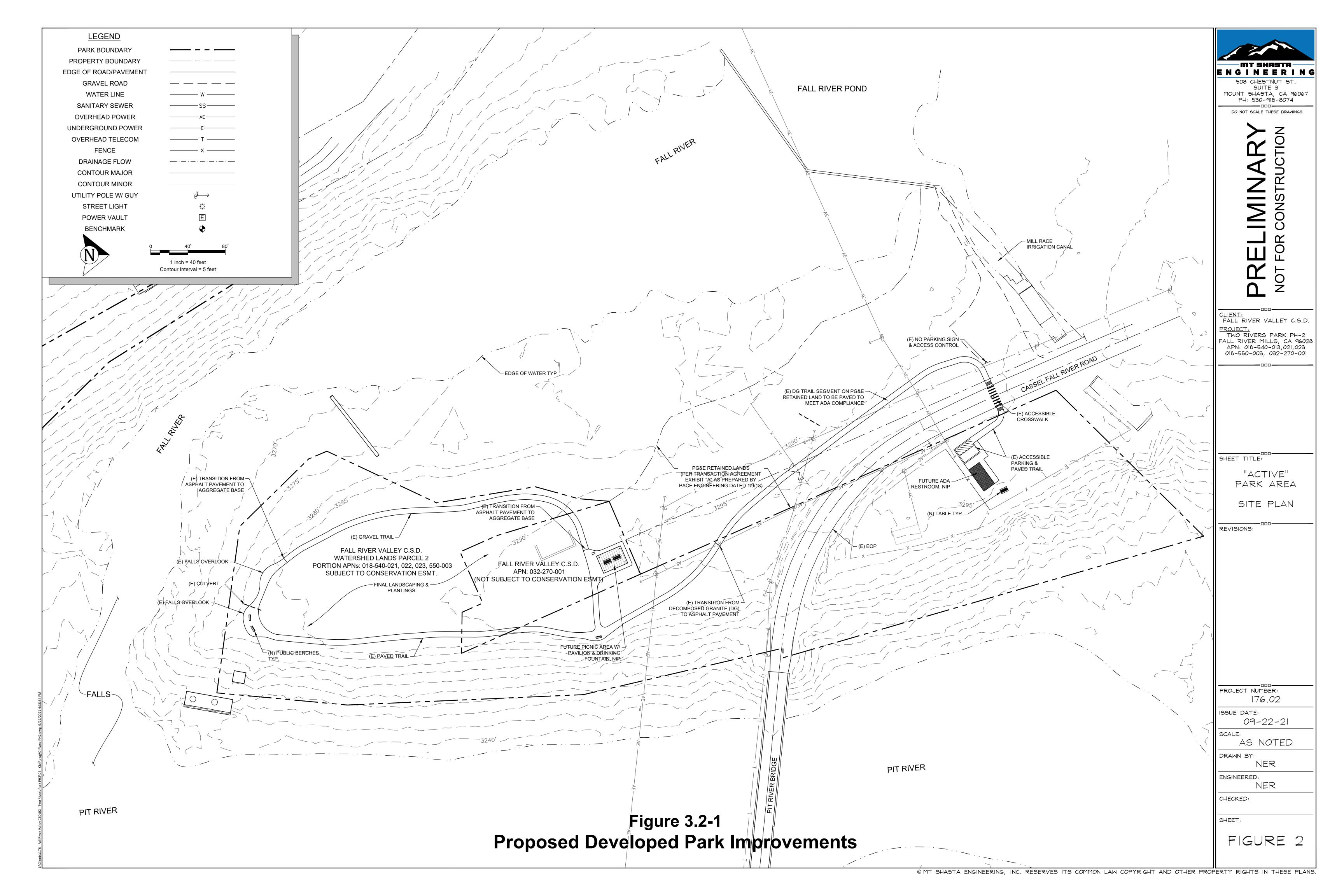
As shown in **Figure 3.2-2**, improvements in the undeveloped park include:

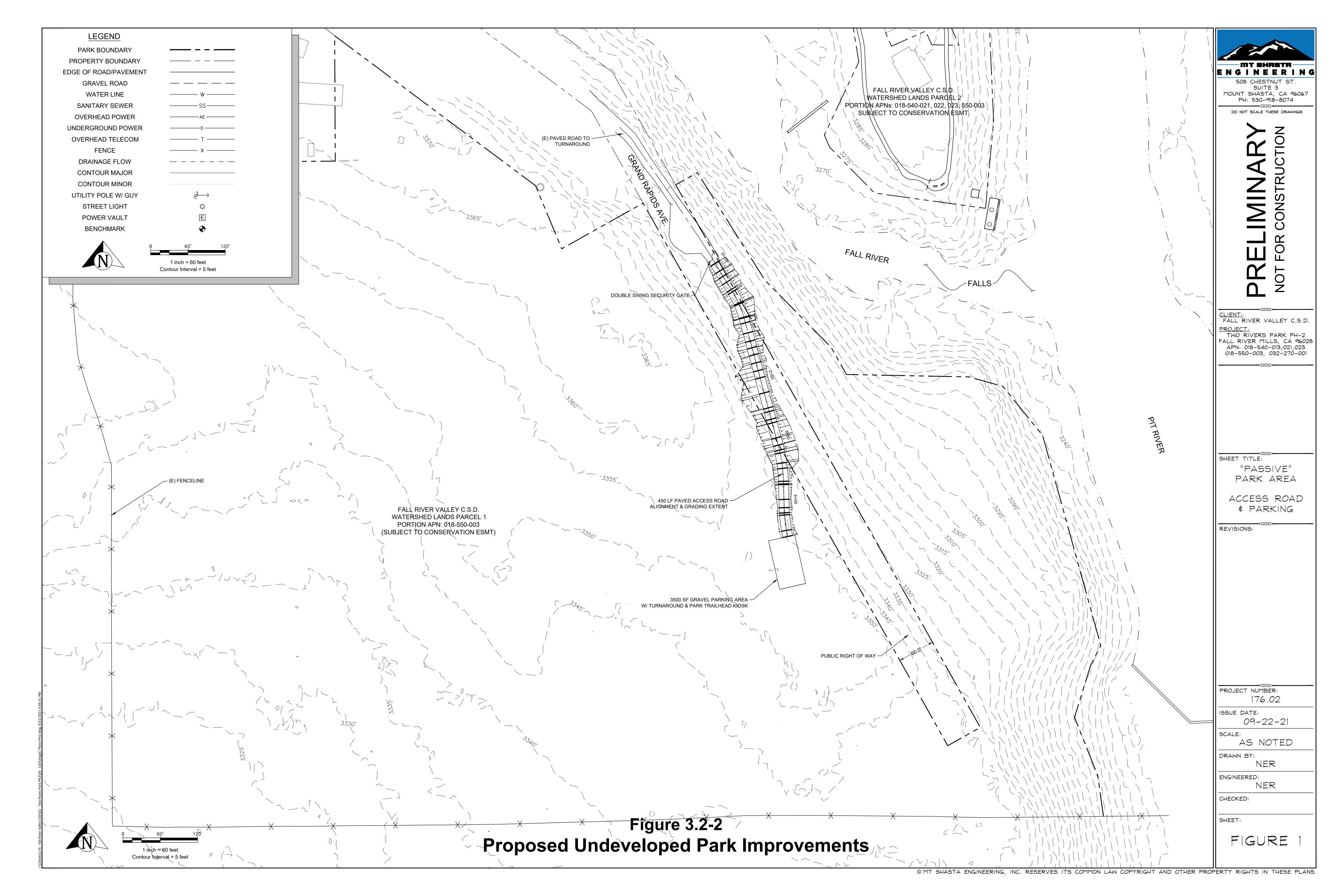
Access Road and Gate

A paved access road would be installed from the paved turnaround on Grand Rapids Avenue to the edge of the proposed parking lot. The majority of the access road would be within the public road right-of-way of Grand Rapids Avenue. The access road would be ± 16 feet in width and ± 450 feet in length. A gate and signage would be installed at the entrance to the park.

Parking Area

A ±40-foot by ±80-foot (maximum 3,500 square-foot) permeable parking area would be installed at the terminus of the proposed access road. Construction of the parking area would include clearing the area of all vegetation, grading a level area, and installing aggregate base. The parking area may be paved in the future as funding becomes available.





Community Trails

Approximately 4,000 linear feet of community trails would be constructed. The trail would be ± 4 feet in width. Surface area disturbance would be $\pm 16,000$ square feet (0.37 acres). The trail would meander through the undeveloped park. The trail would begin and end at the parking area, creating a loop throughout the property. Construction activities would include vegetation removal in areas where the trail would be installed, grading the area, and installing a gravel base. Due to the limited width of the trail, much of the work would be completed by hand without the use of heavy equipment. The trail would be designed to avoid removal of mature trees and other sensitive resources.

Staging Areas

Temporary staging of materials and construction equipment for the developed park area would occur in the existing gravel parking area. Staging for the undeveloped park area would occur at the end of Grand Rapids Avenue adjacent to the development site. Minor clearing of vegetation may be required to establish the staging area; however, no grading or tree removal would occur to prepare staging areas.

3.3 CUMULATIVE IMPACTS ANALYSIS

As defined in §15355 of the CEQA Guidelines, a cumulative impact consists of an impact that is created as a result of the combination of a proposed project together with other closely related past, present, and reasonably foreseeable future projects that cause related impacts. As noted in §15064(h)(4) of the CEQA Guidelines, the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable.

Further, §15130(b) of the CEQA Guidelines states, "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."

In addition to growth associated with the build-out projections in the County's General Plan, the projects described below were considered in determining whether the proposed project's impacts would be cumulatively considerable in accordance with §15064(h) of the CEQA Guidelines. No other related projects were identified as being reasonably foreseeable in accordance with §15144 of the CEQA Guidelines.

Cassel-Fall River Road Bridge Replacement

The Cassel-Fall River Road Bridge Replacement project entails the replacement of the existing Cassel-Fall River Road Bridge over the Pit River with a new bridge located immediately south of the current bridge. The roadway approaches on both sides of the bridge would be shifted south. The project was approved by Shasta County in May 2018. The projected timeline for construction is between spring of 2022 and fall of 2022.

Proposed improvements in the developed park site would occur adjacent to the proposed bridge/roadway improvements. In addition, the existing parking area for the developed park and the proposed restroom are within an area identified as a staging area for the bridge replacement project. If the Cassel-Fall River Road Bridge improvements are constructed simultaneously with proposed improvements in the developed park, cumulative traffic, traffic noise, construction noise, and temporarily increased air emissions during construction would occur.

Fall River Valley Community Services District – McArthur Sewer Collection System
The McArthur Sewer Collection System project includes extending the District's sewer
system to the community of McArthur. The District is in the process of completing
environmental review for the sewer system improvements.

The sewer system improvements would occur generally between the hospital on Highway 299 and the community of McArthur. Because the work area for the sewer system improvements would be about 1.5 miles from the proposed park improvements, even if the two projects were constructed at the same time, no cumulative impacts would occur.

Potential cumulative impacts are further discussed in the applicable resource sections in Section 4.0 below.

SECTION 4.0 ENVIRONMENTAL ANALYSIS (CHECKLIST)

4.1 **AESTHETICS**

Except as provided in Public Resources Code §21099, would the project:

Iss	sues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				\boxtimes
C.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?				

REGULATORY CONTEXT

There are no federal or local regulations pertaining to aesthetics that apply to the proposed project.

STATE

California Scenic Highway Program

The California Scenic Highway Program, administered by the California Department of Transportation (Caltrans), was established in 1963 to preserve and protect the natural beauty of scenic highway corridors in the State. The Scenic Highway System includes a list of highways that have been designated as scenic highways as well as a list of highways that are eligible for designation as scenic highways.

California Building Standards Code

Title 24 of the CCR, also known as the California Building Standards Code (CBSC), is based on the International Building Code (IBC) used widely throughout the country. The CBSC has been modified for California conditions to include more detailed and/or more stringent regulations. Part 11 of the CBSC is the Green Building Standards Code, also known as CALGreen. Section 5.106.8 (Light Pollution Reduction) of the CALGreen Code includes standards and restrictions for outdoor lighting systems. The intent of this requirement is to minimize light pollution in an effort to maintain dark skies and to ensure that newly constructed projects reduce the amount of backlight, uplight, and glare from exterior light sources.

DISCUSSION OF IMPACTS

Question A and C

Scenic vistas are defined as expansive views of highly valued landscapes from publicly accessible viewpoints. Scenic vistas include views of natural features such as mountains, hills, valleys, water courses, outcrops, and natural vegetation, as well as man-made scenic structures.

Developed Park Site

The developed park site is on a peninsula at the convergence of the Fall and Pit Rivers. The park is visible to individuals living in the area, to travelers on adjacent roadways, and to recreational users in limited areas of the Fall and Pit Rivers. Scenic resources in the area of the developed park site include the Fall and Pit Rivers, agricultural lands to the east and southeast across the Pit River, and trees and other vegetation along the banks of the rivers and to the north between the site and the downtown area.

Project components that could result in visual impacts include the new restroom adjacent to the parking area, benches, signage, and the picnic pavilion. However, the restroom and pavilion structures would not exceed ±15 feet in height and would not block views from adjacent properties. In addition, the structures, benches, and signage would include natural materials and colors to blend into the natural landscape, and landscaping would exclusively be native species indicative of the area. Therefore, visual impacts associated with improvements on the developed park site would be **less than significant.**

Undeveloped Park Site

The undeveloped park site is visible to individuals living in the area, to individuals in some areas of the golf course to the west, and to recreational users in limited areas of the Fall and Pit Rivers. Scenic resources in the area include the Fall and Pit Rivers, trees and other vegetation, and open space. The project does not include construction of any new structures that could impede views in the area. There is a natural buffer between the park site and surrounding properties that includes trees and low-lying vegetation. The final design of the trail, access road improvements, and parking area would avoid/minimize the removal of mature, healthy trees. Therefore, visual impacts on the undeveloped park site would be **less than significant**.

Short-term Impacts

The proposed project would have short-term visual impacts during construction due to clearing/grading for the trails, foundations for the bathroom and pavilion structures, and other facilities; however, this would be temporary and cease at completion of the project. Therefore, impacts during construction would be **less than significant.**

Question B

The nearest officially designated State Scenic Highway is Route 151 (Shasta Dam Boulevard), located approximately 55 miles southwest of the project area. The segment of Highway 299 near the project area is eligible for scenic highway designation; however, there are currently no officially designated State Scenic Highways near the project area. Therefore, there would be **no impact** to scenic resources within a designated State Scenic Highway.

Question D

The proposed project includes the installation of exterior lighting on the new restroom structure for security purposes. No new lighting would be added in the undeveloped park area. All lighting needed during construction activities and new permanent lighting would be required to comply with Shasta County Zoning Code Section 17.84.050 (Lighting), which states: "All lighting, exterior and interior, shall be designed and located so as to confine direct lighting to the premises. A light source shall not shine upon or illuminate directly on any surface other than the area required to be lighted.

No lighting shall be of the type or in a location such that it constitutes a hazard to vehicular traffic, either on private property or on abutting streets."

As stated in Section 3.2 (Project Components/Physical Improvements), the project includes installation of solar panels on top of the proposed pavilion. Solar panels are designed to absorb light rather than reflect it, which minimizes glare. In addition, the panels would be small, and impacts associated with glare are not expected. Therefore, impacts associated with light and glare would be **less than significant.**

CUMULATIVE IMPACTS

Potential cumulative projects in the area include growth according to the build-out projections in the County's General Plan and the Cassel-Fall River Road Bridge Replacement project (see Section 3.3, Cumulative Impacts Analysis). The bridge project includes replacing an existing bridge with a new bridge with similar features. No new lighting would be installed on or adjacent to the bridge. As documented above, the proposed project would not significantly change the visual character of the area. Therefore, the proposed project's aesthetic impacts would not be cumulatively significant.

MITIGATION

None necessary

DOCUMENTATION

California Building Standards Commission. 2021. July 1, 2021, Supplement Update - Guide to the 2019 California Green Building Standards Code.

_____. 2019. 2019 Guide to the California Green Building Standards Code (Nonresidential). https://codes.iccsafe.org/content/GCGBSCNR2019/guide-to-the-2019-california-green-building-standards-code-includes-verification-guidelines-nonresidential. Accessed July 2021.

California Department of Transportation. 2021. California State Scenic Highway Mapping System. Shasta County. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed July 2021.

4.2 AGRICULTURE AND FOREST RESOURCES

Would the project:

Iss	ues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?			\boxtimes	
C.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)) or result in the loss of forest land or conversion of forest land to non-forest use?			\boxtimes	
d.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				

REGULATORY CONTEXT

FEDERAL

There are no federal regulations pertaining to agriculture or forest resources that apply to the proposed project.

STATE

California Farmland Mapping and Monitoring Program (FMMP)

The FMMP was established in 1982 to provide data to decision makers to assist them in making informed decisions for the best utilization of California's farmland. Under the FMMP, the Department of Conservation (DOC) is responsible for mapping, monitoring, and reporting on the conversion of the State's farmland to and from agricultural use. The following mapping categories, which are determined based on soil qualities and current land use information, are included in the FMMP: prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, grazing land, urban and built-up land, other land, and water.

Williamson Act

The Williamson Act (California Land Conservation Act of 1965) was enacted as a means to protect agricultural uses in the State. Under the Williamson Act, local governments can enter into contracts with private landowners to ensure that specific parcels are restricted to agricultural and related open space uses. In return, landowners receive reduced property tax assessments. The minimum term for a Williamson Act contract is ten years, and the contract is automatically renewed for one-year terms unless the landowner files a notice of nonrenewal or a petition for cancellation.

Forest Land and Timberland

Public Resources Code (PRC) §12220(g) defines Forest Land as "land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." PRC §4526 defines timberland as "land, other than land owned by the federal government, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees." Government Code §51104(g) defines Timberland Production Zone as "an area which has been zoned pursuant to [Government Code] §51112 or §51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h)."

LOCAL

Shasta County

The Shasta County General Plan includes the following Objective and Policy that apply to the proposed project:

Chapter 6.1,	Chapter 6.1, Agricultural Lands				
Objective:	AG-5	Protection of agricultural lands from development pressures and or uses which will adversely impact or hinder existing or future agricultural operations.			
Policy:	AG-h	The site planning, design, and construction of on-site and off-site improvements for nonagricultural development in agricultural areas shall avoid unmitigable short- and long-term adverse impacts on facilities, such as irrigation ditches, used to supply water to agricultural operations.			

DISCUSSION OF IMPACTS

Questions A, B, and D

According to the *Important Farmland in California* map, the easterly portions of Shasta County were not surveyed for inclusion in the FMMP. Section 21060.1(b) of the California Environmental Quality Act states "In those areas of the state where lands have not been surveyed... 'agricultural land' means land that meets the requirements of "prime agricultural land" as defined in paragraph (1), (2), (3), or (4) of subdivision (c) of Section 51201 of the Government Code." "Prime agricultural land" means any of the following:

- (1) All land that qualifies for rating as class I or class II in the Natural Resource Conservation Service land use capability classifications.
- (2) Land which qualifies for rating 80 through 100 in the Storie Index Rating.
- (3) Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre (AUM) as defined by the United States Department of Agriculture.
- (4) Land planted with fruit- or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars (\$200) per acre.

The Storie Index provides a numeric rating (based upon a 100-point scale) of the relative degree of suitability or value of a given soil for intensive agriculture. The rating is based upon the character of the soil profile, surface texture, steepness of the slope, drainage, alkalinity, fertility, wind and water erosion, acidity, and microrelief.

Soil types present in the project site are summarized in **Table 4.2-1**.

TABLE 4.2-1
Project Site Soils – Farmland Designations

Map Unit Symbol	Soil Name	NRCS Designation	LCC Class and Subclass	Storie Index	AUM
Developed Pa	rk Site				
282	Pittville sandy loam 0-5 percent slopes	Prime farmland if irrigated	Ille	Grade 3 Fair (41 - 60)	N/A
Undeveloped Park Site					
200	Jellycamp-Lassen- Longcreek complex, 2-15 percent slopes	Not prime farmland	VIIs	Grade 5 Very Poor (11 - 20)	N/A
201	Jellycamp-Ollierivas complex, 2-9 percent slopes	Not prime farmland	VIIs	Grade 5 Very Poor (11 - 20)	N/A
282	Pittville sandy loam 0-5 percent slopes	Prime farmland if irrigated	Ille	Grade 3 Fair (41 - 60)	N/A

Source: Natural Resources Conservation Service, 2021

As indicated in **Table 4.2-1**, the NRCS designates Pittville sandy loam soil as prime farmland if irrigated; however, neither of the park sites are irrigated. In addition, none of the soils have an LCC classification that categorizes them as prime farmland, and none of the soils have a Storie Index rating over 80. Information on AUMs for these soil types is not available; however, the project site does not support livestock for the production of food and/or fiber and is not planted with fruit- or nutbearing trees, vines, bushes, or crops.

The undeveloped park site is zoned Open Space (OS). The developed park site is zoned OS and Commercial-Light Industrial (CM). The CM zone does not allow agricultural uses. Although agricultural uses are allowed in the OS zone, a review of aerial imagery dating back to 1985 shows that the project site has not been used for agricultural crop production or other agricultural uses. Therefore, the project would not conflict with existing zoning for agricultural uses. Further, the project site is not under a Williamson Act contract. Properties east of the project area adjacent to the Pit River are zoned Exclusive Agricultural (EA) and EA-Agricultural Preserve and are under a Williamson Act contract; however, the proposed project does not include any components that would conflict with surrounding agricultural uses.

Therefore, the project would not directly or indirectly convert farmland to non-agricultural use and would not conflict with existing zoning for agricultural use or with a Williamson Act contract; impacts would be **less than significant.**

Question C

There are no Timberland Production Zones or Timberland (TL) zones in the project area according to the Shasta County General Plan and County Zoning Map. The closest TL zone is ±0.25 miles east of the study area, east and southeast of the intersection of Cassel-Fall River Road and Dee Knoch Road. The project does not propose any work on or adjacent to the property zoned TL; therefore, there would be **no impact** on timberland.

As stated under Regulatory Context above, "forest land" is defined in PRC §12220(g) as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. The undeveloped park site meets the definition of forest land. The final design of the trail, access road improvements, and parking area would avoid/minimize the removal of mature, healthy trees. Therefore, impacts to forest land would be **less than significant**.

CUMULATIVE IMPACTS

The County's General Plan acknowledges that agricultural land uses are a major component of the County's resource land base and are a major element in defining the quality of life available to the residents of Shasta County. Were agriculture to lose its land base prominence in the County, the rural character and country living valued by its residents and important to its economy would likely decline.

As stated above, the proposed project would not directly or indirectly convert farmland to non-agricultural use and would not conflict with existing zoning for agricultural use or with a Williamson Act contract.

Proposed improvements in the undeveloped park would result in vegetation removal in an area that meets the definition of forest land; however, it is not anticipated that any mature, healthy trees would be removed. Therefore, the project's contribution to cumulative impacts on forest land would be **less than significant.**

MITIGATION

None necessary

DOCUMENTATION

Shasta County. 2001. Chapter 6.1 Agricultural Lands and Chapter 6.2 Timberlands. https://www.co.shasta.ca.us/index/drm/planning/general-plan. Accessed July 2021

U.S. Department of Agriculture, Natural Resource Conservation Service. 2021. Web Soil Survey. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed August 2021.

_____. 2000. Soil Survey of Intermountain Area, California, Parts of Lassen, Modoc, Shasta, and Siskiyou Counties.

https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/intermountainCA2000/IntermountainArea_CA.pdf. Accessed August 2021.

4.3 AIR QUALITY

Would the project:

ls	ssues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?				
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?			\boxtimes	
C.	Expose sensitive receptors to substantial pollutant concentrations?				
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			\boxtimes	

REGULATORY CONTEXT

FEDERAL

Federal Ambient Air Quality Standards

The U.S. Environmental Protection Agency (USEPA), under the federal Clean Air Act (CAA), establishes maximum ambient concentrations for criteria air pollutants (CAP), known as the National Ambient Air Quality Standards (NAAQSs). The NAAQSs are established to protect the health and welfare of the populace with a reasonable margin of safety. **Table 4.3-1** identifies the seven CAPs as well as characteristics, health effects and typical sources for each CAP:

TABLE 4.3-1 Federal Criteria Air Pollutants

Pollutant	Characteristics	Primary Effects	Major Sources
Ozone (O ₃)	Ozone is a colorless or bluish gas formed through chemical reactions between two major classes of air pollutants: reactive organic gases (ROG) and oxides of nitrogen (NOx). These reactions are stimulated by sunlight and temperature; thus, ozone occurs in higher concentrations during warmer times of the year.	 Respiratory symptoms. Worsening of lung disease leading to premature death. Damage to lung tissue. Crop, forest, and ecosystem damage. Damage to a variety of materials, including rubber, plastics, fabrics, paints, and metals. 	Motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills.
Carbon Monoxide (CO)	Carbon monoxide is an odorless, colorless gas produced by the incomplete combustion of carboncontaining fuels, such as gasoline and wood. Because CO is emitted directly from internal	 Chest pain in patients with heart disease. Headache. Light-headedness. Reduced mental alertness. 	Motor vehicle exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.

Nitrogen Dioxide (NO ₂)	combustion engines, motor vehicles operating at slow speeds are the primary source of carbon monoxide. Nitrogen dioxide is a reddish-brown gas formed when nitrogen (N ₂) combines with oxygen (O ₂). Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition. Of the seven types of nitrogen oxide compounds, NO ₂ is the most abundant in the atmosphere and is related to traffic density.	Respiratory symptoms. Damage to lung tissue. Worsening of cardiovascular disease. Precursor to ozone and acid rain. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.	Automobile and diesel truck exhaust, petroleum-refining operations, industrial sources, aircraft, ships, railroads, and fossil-fueled power plants.
Sulfur Dioxide (SO ₂)	Sulfur dioxide is a colorless, nonflammable gas that results mainly from burning high-sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries.	 Respiratory symptoms. Worsening of cardiovascular disease. Damage to a variety of materials, including marble, iron, and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain. 	Petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and large ships, and fuel combustion in diesel engines.
Particulate Matter (PM _{2.5} and PM ₁₀)	Particulate matter is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols that are small enough to remain suspended in the air for a long period of time. Particulate matter with a diameter of 10 microns or less (PM ₁₀) are inhalable into the lungs and can induce adverse health effects. Fine particulate matter is defined as particles that are 2.5 microns or less in diameter (PM _{2.5}). Therefore, PM _{2.5} comprises a portion of PM ₁₀ .	Premature death. Hospitalization for worsening of cardiovascular disease. Hospitalization for respiratory disease Asthma-related emergency room visits. Increased symptoms, increased inhaler usage	Dust- and fume-producing construction activities, power plants, steel mills, chemical plants, unpaved roads and parking lots, woodburning stoves and fireplaces, wildfires, motor vehicles, and other combustion sources. Also, a result of photochemical processes.
Lead	A heavy metal that occurs both naturally in the environment and in manufactured products.	 Impaired mental functioning in children Learning disabilities in children Brain and kidney damage. Reproductive disorders. Osteoporosis. 	Lead-based industrial production (e.g., battery production and smelters), recycling facilities, combustion of leaded aviation gasoline by pistondriven aircraft, and crustal weathering of soils followed by fugitive dust emissions.

STATE

State Ambient Air Quality Standards

The California CAA establishes maximum concentrations for the seven federal CAPs, as well as the four additional air pollutants identified below. The four additional standards are intended to address regional air quality conditions, not project-specific emissions. These maximum concentrations are known as the California Ambient Air Quality Standards (CAAQSs). The California Air Resources Board (CARB) has jurisdiction over local air districts and has established its own standards and violation criteria for each CAP under the CAAQS. For areas within the State that have not attained air quality standards, the CARB works with local air districts to develop and implement attainment plans to obtain compliance with both federal and State air quality standards.

Visibility-Reducing Particles. Visibility-reducing particles vary greatly in shape, size, and chemical composition, and come from a variety of natural and manmade sources. Major sources include wildfires, residential fireplaces and woodstoves, windblown dust, ocean sprays, biogenic emissions, dust and fume-producing construction, industrial and agricultural operations, and fuel combustion. Primary effects include visibility impairment, respiratory symptoms, and worsening of cardiovascular disease.

Sulfate (SO₄). Sulfate is oxidized to sulfur dioxide (SO₂) during the combustion process and is subsequently converted to sulfate compounds in the atmosphere. Major sources include industrial processes and the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. Primary effects include respiratory symptoms, worsening of cardiovascular disease, damage to a variety of materials, including marble, iron, and steel, damage to crops and natural vegetation, and visibility impairment.

Hydrogen Sulfide (H₂S). Hydrogen sulfide is a colorless gas with the odor of rotten eggs. Major sources include geothermal power plants, petroleum refineries, and wastewater treatment plants. Primary effects include eye irritation, headache, nausea, and nuisance odors.

Vinyl Chloride (chloroethene). Vinyl chloride, a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. It is also listed as a toxic air contaminant because of its carcinogenicity. Most vinyl chloride is used to make PVC plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites due to microbial breakdown of chlorinated solvents. Primary effects include dizziness, drowsiness, headaches, and liver damage.

Table 4.3-2 provides the federal and State ambient air quality standards:

TABLE 4.3-2 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards
Ozono (O+)	8 Hour	0.070 ppm (137μg/m³)	0.070 ppm (137µg/m³)
Ozone (O ₃)	1 Hour	0.09 ppm (180 μg/m³)	_
Carban Manavida (CO)	8 Hour	9 ppm (10 mg/m³)	9 ppm (10 mg/m³)
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)
Nitrogon Diovido (NO.)	1 Hour	0.18 ppm (339 μg/m³)	100 ppb (188 μg/m³)
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)
Sulfur Diovido (SOs)	24 Hour	0.04 ppm (105 μg/m³)	0.14
Sulfur Dioxide (SO ₂)	3 Hour	_	_

Initial Study: Fall River Valley CSD, Two Rivers Park Project

Pollutant	Averaging Time	California Standards	National Standards
	1 Hour	0.25 ppm (665 μg/m ³)	75 ppb (196 μg/m³)
	Annual Arithmetic Mean	_	0.030 ppm
Portioulate Matter (PM.s)	Annual Arithmetic Mean	20 μg/m ³	-
Particulate Matter (PM ₁₀)	24 Hour	50 μg/m ³	150 μg/m³
Particulate Matter – Fine	Annual Arithmetic Mean	12 μg/m ³	12 μg/m³
(PM _{2.5})	24 Hour	_	35 μg/m³
Sulfates	24 Hour	25 μg/m ³	-
	Calendar Quarter	_	1.5 μg/m ³
Lead	30 Day Average	1.5 μg/m ³	_
	Rolling 3-Month Average	None	0.15 μg/m ³
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	-
Vinyl Chloride (chloroethene)	24 Hour	0.01 ppm (26 μg/m³)	_
Visibility-Reducing Particles	8 Hour	-	_

Source: CARB 2016. Notes: mg/m³=milligrams per cubic meter; ppm=parts per million; ppb=parts per billion; μg/m³=micrograms per cubic meter

NAAQS and CAAQS Attainment Designations

Shasta County has been designated a non-attainment area for State ozone standards. On August 13, 2021, CARB submitted proposed amendments to the area designations to the State Office of Administrative Law for final approval. The proposed amendments include changing Shasta County from non-attainment to non-attainment-transitional for the State ozone standard. The County is designated as in attainment or unclassified for all other federal and State ambient air quality standards.

Toxic Air Contaminants

In addition to the California CAPs, Toxic Air Contaminants (TACs) are another group of pollutants regulated under the California CAA. TACs are less pervasive in the urban atmosphere than the CAPs, but are linked to short-term (acute) and long-term (chronic or carcinogenic) adverse human health effects, including cancer, birth defects, neurological damage, and death. Sources of TACs include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), grading and demolition of structures (asbestos), and diesel-motor vehicle exhaust. Under Assembly Bill 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987, facilities found to release high volumes of toxic air pollution are required to conduct a detailed health risk assessment that estimates emission impacts to the neighboring community and recommends mitigation to minimize TACs.

Mobile Source Strategy

CARB's Mobile Source Strategy describes the State's strategy for containing air pollutant emissions from vehicles, and demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risks from transportation emissions, and reduce petroleum consumption.

California Energy Code

The California Energy Code (Part 6 of the CBSC), also known as the State's Energy Efficiency Standards, was established by the California Building Standards Commission in 1978 with a goal of reducing California's energy consumption for residential and nonresidential buildings. The Standards include mandatory measures related to building envelopes, mechanical systems, indoor and outdoor lighting, and electrical power distribution.

LOCAL

Shasta County Air Quality Management District (SCAQMD):

The SCAQMD has the responsibility of enforcing federal and state air quality regulations in Shasta County. The SCAQMD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs, and it regulates agricultural burning. All projects in Shasta County are subject to applicable SCAQMD rules and regulations in effect at the time of construction. Descriptions of specific rules applicable to the proposed project may include, but are not limited to:

- Cutback and emulsified asphalt application shall be conducted in accordance with SCAQMD Rule 3-15, Cutback and Emulsified Asphalt.
- SCAQMD Rule 3-16, Fugitive, Indirect, or Non-Traditional Sources, controls the emission of fugitive dust during earth-moving, construction, demolition, bulk storage, and conditions resulting in wind erosion.
- Architectural coatings and solvents shall be compliant with SCAQMD Rule 3-31, Architectural Coatings.

Shasta County is currently designated as a non-attainment area for State ozone standards; the County is designated as an attainment or unclassified area for all other federal and State ambient air quality standards.

The SCAQMD, along with other air districts in the Northern Sacramento Valley Air Basin (NSVAB), jointly prepared an Air Quality Attainment Plan (AQAP) for the purpose of achieving and maintaining healthful air quality throughout the air basin. The Northern Sacramento Valley Planning Area (NSVPA) 2018 Triennial AQAP constitutes the region's State Implementation Plan (SIP). The NSVPA 2018 AQAP, adopted by the SCAQMD Board on May 7, 2019, includes updated control measures for the three-year period of 2019 through 2021. Shasta County has determined that the County's primary emphasis in implementing the 2018 Attainment Plan is to attempt to reduce emissions from mobile sources through public education and grant programs.

As shown in **Table 4.3-3**, Shasta County has adopted air quality thresholds for emissions of Reactive Organic Gases (ROG), Oxides of Nitrogen (NOx) and Particulate Matter, 10 microns in size (PM₁₀) to determine the level of significance for projects subject to CEQA review (Shasta County Rule 2:1, New Source Review, Part 300).

TABLE 4.3-3
Thresholds of Significance for Criteria Pollutants of Concern

Level	ROG	NOx	PM ₁₀
Level A: Indirect Source	25 lbs/day	25 lbs/day	80 lbs/day
Level B: Indirect Source	137 lbs/day	137 lbs/day	137 lbs/day
Direct Sources	25 tons/year	25 tons/year	25 tons/year

Source: 2004 Shasta County General Plan, Chapter 6.5 (Air Quality).

All discretionary projects in Shasta County are required to implement Standard Mitigation Measures (SMMs) to achieve the highest feasible reduction in emissions and contribute to a reduction in cumulative impacts. Projects that generate unmitigated emissions above Level A must implement Best Available Mitigation Measures (BAMM) in addition to the SMMs. If a project is not able to reduce emissions below the Level B threshold, emissions offsets are required. If after applying the emissions offsets, the project emissions still exceed the Level B threshold, an Environmental Impact Report is required.

DISCUSSION OF IMPACTS

Questions A and B

As discussed in the Regulatory context, for areas within the State that have not attained air quality standards, the CARB works with local air districts to develop and implement attainment plans to obtain compliance with both federal and State air quality standards. The NSVAP 2018 AQAP serves as the air quality plan for the region.

Project emissions were estimated using Version 2020.04.0 of the California Emissions Estimator Model (CalEEMod). CalEEMod does not directly calculate ozone (O₃) emissions. Instead, the emissions associated with ozone precursors are calculated. Ozone precursors are quantified as ROG and NO_X which, when released, interact in the atmosphere and produce ozone. CalEEMod provides default values when site-specific inputs are not available.

For the proposed project, site-specific inputs and assumptions include, but are not limited to, the following. Output files, including all site-specific inputs and assumptions, are provided in **Appendix A**.

- Emissions from construction are based on all construction-related activities, including but not limited to site preparation, grading, use of construction equipment, material hauling, and paving.
- Emissions from operation of the proposed project are based on all proposed and future operational activities, including vehicle traffic, water use, solid waste disposal, use of architectural coatings (paint), etc.
- Construction would start in May 2022 and occur over a period of eight months.
- Total land disturbance would be approximately 0.8 acres. 750 cubic yards (CY) of dirt would be imported; no dirt would be exported.
- The total area to be paved would be 0.23 acres.
- It is conservatively estimated that the solar panels would generate 85 percent of the energy required for the restroom and the drinking fountain pump.
- The project would implement SCAQMD rules, regulations, and standard mitigation measures.

Construction Emissions

Construction activities would result in short-term increases in emissions from the use of construction equipment, soil disturbance, materials used in construction, and construction traffic. Project construction would produce fugitive dust (PM_{10} and $PM_{2.5}$) during ground disturbance and would generate ROG and NO_X due to construction worker vehicle trips, delivery of materials, and construction equipment exhaust. CalEEMod reports construction emissions as totals for the entire construction period, while the air quality standard is based on daily emission levels.

The proposed project is subject to the In-Use Off-Road Diesel Vehicle Regulation adopted by CARB. The off-road regulation imposes limits on idling, requires all vehicles be reported to CARB and subsequently labeled, restricts adding older vehicles into fleets, and requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). Large and medium fleets have annual compliance deadlines through 2023. Small fleets have compliance deadlines each year from 2019-2028.

Table 4.3-4 shows the highest daily levels of project construction emissions regardless of construction phase.

Table 4.3-4
Estimated Construction Emissions

Pollutants of Concern (Maximum Pounds per Day)						
ROG NO _X PM ₁₀ PM _{2.5} CO SO ₂						
2.3	24.7	5.0	2.97	16.17	0.04	

Source: CalEEMod, 2021.

As shown in **Table 4.3-4**, construction of the proposed project would not exceed the SCAQMD Level A or Level B thresholds shown in **Table 4.3-3**.

Operational Emissions

As shown in **Table 4.3-5**, operation of the project would generate criteria pollutants from area sources (e.g., cleaning supplies, maintenance activities such as painting, landscaping equipment, etc.), and mobile sources (e.g., vehicle trips for visitors and maintenance workers). Particulate matter would be generated primarily due to vehicle travel in unpaved areas. The project would also generate minimal indirect emissions associated with energy use, solid waste disposal, and water treatment and distribution.

Table 4.3-5
Estimated Operational Emissions

	Pollutants of Concern (Maximum Pounds per Day)								
Category	Category ROG NO _X PM ₁₀ PM _{2.5} CO SO ₂								
Area	0.04	Trace	Trace	Trace	Trace	0			
Mobile	0.35	0.42	0.4	0.11	2.4	Trace			
Total	0.39	0.42	0.41	0.11	2.4	Trace			

Source: CalEEMod, 2021.

As shown in **Table 4.3-5**, operation emissions would not exceed the SCAQMD Level A or Level B thresholds shown in **Table 4.3-3**.

In addition, for both construction and operation, the proposed project would not result in significant impacts associated with ozone (O₃), lead (Pb), hydrogen sulfide (H₂S), vinyl chloride, or visibility-reducing particles as discussed below.

Ozone. CalEEMod does not directly calculate ozone emissions. Instead, the emissions associated with ozone precursors (ROG and NOx) are calculated. Because project construction would generate relatively low amounts of both ROG and NOx, the potential for ozone production/emissions is less than significant.

Lead. Elevated levels of airborne lead at the local level are usually found near industrial operations that process materials containing lead, such as smelters and battery manufacturing/recycling facilities. As these conditions are not applicable to the proposed project, there is no potential for lead emissions.

Hydrogen Sulfide. Hydrogen sulfide is formed during the decomposition of organic material in anaerobic environments, including sewage treatment processes. The proposed restroom would

connect to the District's public sewer system; however, use of the restroom would be limited to visitors to the park, and the generation of wastewater and resulting hydrogen sulfide emissions would be minimal.

Vinyl Chloride. Vinyl chloride is used to manufacture polyvinyl chloride (PVC) plastic and other vinyl products. Additionally, vinyl chloride is produced during the microbial breakdown of chlorinated solvents (e.g., engine cleaner, degreasing agent, adhesive solvents, paint removers, etc.). The potential for vinyl chloride exposure is primarily limited to areas in close proximity to PVC production facilities. Because PVC manufacturing facilities are absent from the project area, and project implementation would not result in an increase of chlorinated solvents, there is no potential for vinyl chloride emissions.

Visibility-Reducing Pollutants. Visibility-reducing pollutants generally consist of sulfates, nitrates, organics, soot, fine soil dust, and coarse particulates. These pollutants contribute to the regional haze that impairs visibility, in addition to affecting public health. According to the California Regional Haze Management Plan, natural wildfires and biogenic emissions are the primary contributors to visibility-reducing pollutants. For the proposed project, relatively low amounts of visibility-reducing pollutants (e.g., PM_{2.5} and PM₁₀) would be generated only during construction activities; therefore, potential impacts with respect to visibility-reducing pollutants are less than significant.

The NSVPA 2018 AQAP stationary source measures have been incorporated into the SCAQMD rules. Non-stationary measures identified in the AQAP include grant funding through the Carl Moyer Program for purchase/replacement of cleaner-than-required engines and equipment, motor vehicle registration fees, and public education programs. The project must comply with applicable SCAQMD regulations, including but not limited to those identified above. The non-stationary measures do not apply to the proposed project. Further, the project would not exceed the SCAQMD thresholds during construction or operation. Therefore, the project would not conflict with or obstruct implementation of the NSVPA 2018 AQAP and would not result in a cumulatively considerable net increase in ozone precursors (ROG and NOx). Impacts would be less than significant.

Question C

See discussion under Questions A and B. Sensitive receptors are individuals or groups of people that are more affected by air pollution than others, including young children, elderly people, and people weakened by disease or illness. Locations that may contain high concentrations of sensitive receptors include residential areas, schools, playgrounds, childcare centers, hospitals, convalescent homes, and retirement homes.

Sensitive receptors in the project area include residences ±150 feet north of the developed park on Main Street and Bridge Street, and residences ±250 feet northwest of proposed roadway improvements on Grand Rapids Avenue and ±200-300 feet north of proposed trail improvements in the undeveloped park.

As discussed above, the proposed project would generate PM₁₀ and other pollutants during construction. Although these emissions would cease with completion of construction work, sensitive receptors adjacent to the construction area could be exposed to elevated dust levels and other pollutants. Compliance with federal, State, and local regulations, and implementation of **Mitigation Measure (MM) 4.3.1** would reduce construction-related impacts to a **less-than-significant** level.

The new unpaved parking area in the undeveloped park would increase long-term fugitive dust that could expose sensitive receptors to pollutant concentrations. In addition, in the event that the access road from Grand Rapids Avenue to the parking lot is not paved, fugitive dust could occur in this area. **MM 4.3.2** requires that unpaved areas with vehicular traffic (i.e., roads, driveways, and the parking lot) include coarse aggregate base (gravel) to minimize fugitive dust emissions. **MM 4.3.2** requires the District to post signs that limit vehicle speed in unpaved areas to 15 miles per hour. If approved

by Shasta County, such speed limit signs shall also be placed along unpaved areas in the County's road right-of-way of Grand Rapids Avenue. The project does not have any other sources of pollutants that would impact sensitive receptors in the long-term. With implementation of **MM 4.3.1**, **MM 4.3.2**, and **MM 4.3.3**, construction-related and operational impacts would be **less than significant**.

Question D

Construction activities that have the potential to emit odors and similar emissions include operation of diesel equipment, use of paints and other architectural coatings, and generation of fugitive dust. Odors and similar emissions from construction are intermittent and temporary, and generally would not extend beyond the construction area. Due to the temporary and intermittent nature of construction odors, impacts during construction would be **less than significant.**

Odors and similar emissions associated with operation of the proposed project include emissions from vehicles, maintenance activities (painting, pavement maintenance, re-roofing, etc.), use of gaspowered landscape equipment, and similar activities. Operational odors and similar emissions would be intermittent and are not expected to be significantly greater than existing conditions. Therefore, operational impacts would be **less than significant**.

CUMULATIVE IMPACTS

Past, present, and future development projects contribute to a region's air quality conditions on a cumulative basis; therefore, by its very nature, air pollution is largely a cumulative impact. If a project's individual emissions contribute toward exceedance of the NAAQS or the CAAQS, then the project's cumulative impact on air quality would be considered significant. In developing attainment designations for criteria pollutants, the USEPA considers the region's past, present, and future emission levels. In addition, local air districts determine suitable significance thresholds based on an area's designated nonattainment status, which also considers the region's past, present, and future emissions levels.

The proposed project combined with future development in the project area (see Section 3.3, Cumulative Impacts Analysis) could lead to cumulative impacts to air quality. However, as stated under Regulatory Context, SMMs apply to all discretionary projects in Shasta County in order to reduce cumulative impacts (refer to **MM 4.3.1**). In addition, as discussed above, emissions resulting from the proposed project would not exceed Shasta County thresholds, and construction would be in conformance with CARB and the applicable SIP developed to address cumulative emissions of criteria air pollutants in the NSVAB. Potential operational impacts would be minimized with implementation of **MM 4.3.2 and MM 4.4.3**. Therefore, the proposed project's contribution to cumulative impacts would be less than significant.

MITIGATION

MM 4.3.1 The following measures shall be implemented throughout construction:

- a. All material excavated, stockpiled, or graded shall be covered or sufficiently watered to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of ambient air quality standards. Watering shall occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day.
- b. All material transported offsite shall be either sufficiently watered or securely covered to prevent a public nuisance.
- c. All areas (other than paved roads) with vehicle traffic shall be watered periodically or have dust palliatives applied for stabilization of dust emissions.
- d. All on-site vehicles shall be limited to a speed of 15 miles per hour on unpaved roads.

- e. All land clearing, grading, earth moving, and excavation activities on the project site shall be suspended when winds are causing excessive dust generation.
- f. All trucks hauling dirt, sand, soil, or other loose materials shall be covered or shall maintain at least two feet of free board in accordance with the requirements of Section 23114 of the California Vehicle Code. This provision is enforced by local law enforcement agencies.
- g. Paved streets in and adjacent to the construction site shall be swept or washed at the end of the day to remove excessive accumulations of silt and/or mud resulting from activities on the development site.
- h. When not in use, motorized construction equipment shall not be left idling for more than five minutes.
- **MM 4.3.2** In order to minimize fugitive dust emissions, all unpaved areas with vehicular traffic (e.g., the new parking area and/or access road for the undeveloped park) shall be covered with coarse aggregate base no smaller than 20 millimeters. The gravel shall be maintained, and gravel shall be added/replaced as needed.
- MM 4.3.3 In unpaved areas with vehicular traffic (e.g., the new parking area and/or access road for the undeveloped park) that are on the District's property, the District shall post signs that limit vehicle speed to 15 miles per hour. If approved by Shasta County, such signs shall be placed along unpaved areas in the County's road right-of-way of Grand Rapids Avenue.

DOCUMENTATION

- California Air Resources Control Board. 2021. Proposed 2020 Amendments to Area Designations for Stater Ambient Air Quality Standards. https://ww2.arb.ca.gov/rulemaking/2021/sad2020. Accessed September 2021.
- _____. 2021. Ambient Air Quality Standards. https://ww2.arb.ca.gov/resources/background-air-quality-standards. Accessed September 2021.
- _____. 2021. Air Toxics Program Website. https://ww2.arb.ca.gov/our-work/programs/air-toxics-program/resources. Accessed September 2021.
- ____. 2019. Area Designations Maps—State and National. http://www.arb.ca.gov/desig/adm/adm.htm. Accessed September 2021.
- _____. 2016. In-Use Off-Road Diesel-Fueled Fleets Regulation Overview.

 https://ww3.arb.ca.gov/msprog/ordiesel/faq/overview_fact_sheet_dec_2010-final.pdf. Accessed September 2021.
- _____. 2009. California Regional Haze Plan.
 - https://www.arb.ca.gov/planning/reghaze/final/rhplan final.pdf. Accessed September 2021.
- Sacramento Valley Air Quality Engineering and Enforcement Professionals (SVAQEEP). 2018. Northern Sacramento Valley Planning Area 2018 Triennial Air Quality Attainment Plan. https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/aq-docs/2018 triennial air quality attainment plan.pdf, July 26, 2018. Accessed September 2021.
- Shasta County Air Quality Management District. 2004. Shasta County General Plan, Chapter 6.5 (Air Quality). http://www.co.shasta.ca.us/index/drm index/planning index/plng general plan.aspx.
- Accessed September 2021.

 U.S. Department of Health and Human Services. 2006. Toxicological Profile for Vinyl Chloride.

http://www.atsdr.cdc.gov/toxprofiles/tp20.pdf. Accessed September 2021.

Initial Study: Fall River Valley CSD, Two Rivers Park Project

U.S. Environmental Protection Agency. 2021. Criteria Air Pollutants.
https://www.epa.gov/criteria-air-pollutants. Accessed September 2021.
_____. 2020. Nitrogen Oxide Emissions.
http://www3.epa.gov/climatechange/ghgemissions/gases/n2o.html. Accessed September 2021.

Shasta County. 2001. General Plan Chapter 6.5 Air Quality. https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/docs/65airq.pdf?sfvrsn=795163e5 0 Accessed August 2021

4.4 BIOLOGICAL RESOURCES

Would the project:

ls	sues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		\boxtimes		
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
C.	Have a substantial adverse effect on state or federally protected wetlands, (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption or other means?				
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			\boxtimes	
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

REGULATORY CONTEXT

FEDERAL

Federal Clean Water Act

Section 404

Under Section 404 of the Clean Water Act (CWA), the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and fill material into wetlands and waters of the U.S. The USACE requires that a permit be obtained prior to the placement of structures within, over, or under navigable waters and/or prior to discharging dredged or fill material into waters below the ordinary high-water mark (OHWM). There are several types of permits issued by the USACE that are based on the project's location and/or level of impact. Regional general permits are issued for recurring activities at a regional level. Nationwide permits (NWPs) authorize a wide variety of minor activities that have minimal effects. Projects that are not covered under a regional general permit and do not qualify for a NWP are required to obtain a standard permit (e.g., individual permit or letter of permission).

Section 401

Under Section 401 of the CWA, a project requiring a USACE Section 404 permit is also required to obtain a State Water Quality Certification (or waiver) to ensure that the project will not violate established State water quality standards. The RWQCB regulates waters of the State and has a policy of no-net-loss of wetlands. The RWQCB typically requires mitigation for impacts to wetlands before it will issue a water quality certification.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 requires that all federal agencies ensure that any action they authorize, fund, or carry out will not likely jeopardize the continued existence of federally listed species or result in the destruction or adverse modification of critical habitat. Projects that would result in "take" of any federally listed species are required to obtain authorization from National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) through either Section 7 (interagency consultation) or Section 10(a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project.

Federal Migratory Bird Treaty Act

Under the Migratory Bird Treaty Act (MBTA) of 1918, as amended, migratory bird species listed in CFR Title 50, §10.13, including their nests and eggs, are protected from injury or death, and any project-related disturbances. The MBTA applies to over 1,000 bird species, including geese, ducks, shorebirds, raptors, and songbirds, some of which were near extinction before MBTA protections were put in place in 1918. The MBTA provides protections for nearly all native bird species in the U.S., including non-migratory birds.

Fish and Wildlife Conservation Act

Under the Fish and Wildlife Conservation Act of 1980, as amended, the USFWS maintains lists of migratory and non-migratory birds that, without additional conservation action, are likely to become candidates for listing under the FESA. These species are known as Birds of Conservation Concern and represent the highest conservation priorities.

Bald and Golden Eagle Protection Act

This Act provides for the protection of the bald eagle and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds and their occupied and unoccupied nests.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), also known as the Sustainable Fisheries Act, requires the identification of Essential Fish Habitat (EFH) for federally managed fishery species and implementation of appropriate measures to conserve and enhance EFH that could be affected by project implementation. All federal agencies must consult with NMFS on projects authorized, funded, or undertaken by that agency that may adversely affect EFH for species managed under the MSFCMA.

STATE

California Endangered Species Act

Under the California Endangered Species Act (CESA), the Fish and Game Commission is responsible for listing and delisting threatened and endangered species, including candidate species for threatened or endangered status. CDFW provides technical support to the Commission, and may submit listing petitions and assist with the evaluation process. CDFW maintains documentation on listed species, including occurrence records. In addition, CDFW maintains a list of fully protected species, most of which are also listed as threatened or endangered. CDFW also maintains a list of species of special concern (SSC). SSC are vulnerable to extinction but are not legally protected under CESA; however, impacts to SSC are generally considered significant under CEQA.

CESA prohibits the take of State-listed threatened and endangered species, but CDFW has the authority to issue incidental take permits under special conditions when it is demonstrated that impacts are minimized and mitigated. Fully protected species may not be taken or possessed at any time, and no licenses or permits may be issued for their take. One exception allows the collection of fully protected species for scientific research.

California Fish and Game Code §1600-1616 (Streambed Alteration)

California Fish and Game Code §1600 *et seq.*, requires that a project proponent enter into a Streambed Alteration Agreement (SAA) with CDFW prior to any work that would divert or obstruct the natural flow of any river, stream, or lake; change the bed, channel, or bank of any river, stream, or lake; use material from any river, stream, or lake; and/or deposit or dispose of material into any river, stream, or lake. An SAA will typically include conditions that minimize/avoid potentially significant adverse impacts to riparian habitat and waters of the state.

California Fish and Game Code §3503 and 3503.5 (Nesting Bird Protections)

These sections of the Code provide regulatory protection to resident and migratory birds and all birds of prey within the State and make it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Code.

California Fish and Game Code §1900-1913 (Native Plant Protection Act)

The Native Plant Protection Act (NPPA) includes measures to preserve, protect, and enhance native plants that are listed as rare and endangered under the CESA. The NPPA states that no person shall take, possess, sell, or import into the state, any rare or endangered native plant, except in compliance with provisions of the Act.

Oak Woodlands Conservation Act

The State of California provides for oak protection through the Oak Woodlands Conservation Act (Act), last amended in 2005. The Act applies only when the lead agency is a county and the project is located in an unincorporated county area. The Act requires a determination of whether the project may result in the conversion of oak woodlands that will have a significant effect on the environment as well as implementation of oak woodland mitigation measures, if necessary.

LOCAL

Shasta County

The Shasta County General Plan includes the following Objective and Policy that apply to the proposed project:

Chapter 6.7,	Chapter 6.7, Fish and Wildlife				
Objective:	FW-1	Protection of significant fish, wildlife and vegetation resources.			
Policy:	FW-c	Projects that contain or may impact endangered and/or threatened plant or animal species, as officially designated by the California Fish and Game Commission and/or the U. S. Fish and Wildlife Service, shall be designed or conditioned to avoid any net adverse project impacts on those species.			

DISCUSSION OF IMPACTS

Question A

The following evaluation of potential impacts on special-status species is based on a Biological Resource Assessment prepared for the developed park area by Spring Rivers Ecological Sciences, LLC, in 2012, and records searches and field studies conducted for both the developed and undeveloped park area by an ENPLAN biologist in 2021.

The records searches included a review of the California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) records, and USFWS records, critical habitat data presented in the USFWS species list, and essential fish habitat (EFH) data maintained by NMFS. NMFS does not maintain a species list for the project quadrangles (Fall River Mills and Hogback Ridge) because construction of Shasta Dam and Keswick Dam prevent anadromous salmonids in the Sacramento River from accessing spawning/rearing habitat in the Pit River.

The study area encompasses approximately 35 acres. Total ground disturbance in the developed park would be ± 0.07 acres (3,049 square feet), for construction of the public restroom and pavilion, and paving a section of the existing trail. Total ground disturbance in the undeveloped park would be ± 0.62 acres for construction of the access road, parking area, and trail system.

The biological study area generally encompassed the entirety of the developed and undeveloped park areas, excluding known river and wetland areas along the Fall and Pit Rivers. A field survey was conducted by an ENPLAN biologist on August 31, 2021, and the project area was inspected where accessible to evaluate potential direct and indirect impacts to special-status species and/or their habitats. In addition, botanical and wildlife surveys were completed by ENPLAN for the developed park area in conjunction with the Cassel-Fall River Road Bridge Replacement project on multiple occasions between 2010 and 2016.

Appendix B provides key biological data developed for the project, including the records search results, and an evaluation of the potential for special-status plant and wildlife species to be affected by project implementation.

Special-Status Plant Species

Review of the USFWS species lists for the project area identified no federally listed plant species as potentially occurring in the project area. The project area does not contain designated critical habitat for federally listed plant species (see **Appendix B**).

Review of CNDDB records found that no special-status plants have been reported in the project site. Six special-status plant species have been reported within a five-mile radius of the project area: Boggs Lake hedge hyssop, marsh skullcap, Tracy's eriastrum, tufted loosestrife, water stargrass, and watershield. CNDDB records identified one non-status species within five miles of the project: profuse-flowered pogogyne. **Table 1** (**Appendix B**) summarizes the CNDDB species report.

The CNPS Inventory of Rare and Endangered Plants was queried for occurrences within the two USGS quadrangles containing the project site: Fall River Mills and Hogback Ridge. The search identified five additional special-status plant species with a potential to occur in the project area: bristly sedge, hairy marsh hedge-nettle, Lemmon's milk-vetch, long-leaved starwort, and northern slender pondweed, and four additional non-status plants: Baker cypress, castlegar hawthorne, Susanville milk-vetch, and Tehama navarretia. **Table 2** (**Appendix B**) summarizes the CNPS results.

A Biological Resource Assessment (BSA) report was prepared in 2012 by Spring Rivers Ecological Sciences, LLC., that covered the developed park site (see **Appendix B**). The study identified silvery false lupine (Rare Plant Rank 4.3) in the developed park site, specifically on the west side of an existing dirt access road. This area has been heavily disturbed due to demolition of structures and installation of a trail system throughout the site, and silvery false lupine is no longer present in this location. Further, Rank 4.3 plants are not considered special-status and no further analysis is warranted.

No other special-status plants were observed in the developed park site during the Spring Rivers 2012 botanical surveys or ENPLAN's botanical surveys. Improvements proposed in the developed park would occur in previously disturbed areas, and no impact to special-status species would occur. Therefore, no further analysis of the developed park site is warranted.

Table 3 (**Appendix B**) identifies special-status plants that could potentially be present in the undeveloped park site. As documented, one special-status plant, Tracy's eriastrum, has a potential to occur in the undeveloped park site. In addition, other special-special-status plants that were not identified in the records search could potentially occur in the undeveloped park site.

As required by **MM 4.4.1**, prior to any earth disturbance in the undeveloped park site, a botanical field survey must be conducted by a qualified biologist to determine the presence or absence of special-status plant species. The survey would be conducted during a time of year when the plants would be readily identifiable.

Should special-status plants be observed during the field survey(s), a suitable buffer zone would be determined by a qualified biologist in consultation with CDFW and/or USFWS, and exclusionary fencing would be placed around the non-disturbance area prior to commencement of construction. If avoidance is not feasible, a detailed mitigation plan must be prepared and submitted to CDFW and/or USFWS for review and approval. With implementation of **MM 4.4.1**, potential impacts on special-status plant species would be **less than significant**.

Special-Status Wildlife Species

Review of the USFWS species lists for the project area identified three special-status wildlife species as potentially being present in the project area: Shasta crayfish, delta smelt, and northern spotted owl. The project area does not contain designated critical habitat for federally listed wildlife species (see **Appendix B**).

Review of CNDDB records found that no special-status wildlife species have been reported in the project site. Sixteen special-status wildlife species have been reported within a five-mile radius of the project site: American badger, bald eagle, bank swallow, bigeye marbled sculpin, California wolverine, greater sandhill crane, hardhead, Oregon snowshoe hare, Oregon spotted frog,

osprey, prairie falcon, rough sculpin, Shasta crayfish, Townsend's big-eared bat, tricolored blackbird, and western pond turtle. CNDDB identified nine non-status species as occurring within a 5-mile radius of the project site: kneecap lanx, montane peaclam, nugget pebblesnail, osprey, prairie falcon, scalloped juga, Sucker Springs pyrg, western pearlshell, and western ridged mussel. **Table 1** (**Appendix B**) shows the results of the CNDDB records search.

The BSA conducted in 2012 identified northwestern pond turtle, bald eagle, and Townsend's bigeared bat as potentially being present in the developed park site. However, all proposed improvements in the developed park site would be completed in previously disturbed areas with no suitable habitat for northwestern pond turtle or bald eagle. Buildings on the developed park site that were previously identified as suitable habitat for Townsend's big-eared bat have since been demolished.

A general habitat assessment was conducted on-site by an ENPLAN biologist on August 31, 2021, to determine the potential for special-status wildlife species to be present in the undeveloped park site. As documented in **Table 3 (Appendix B)**, no special-status wildlife species are expected to be present in the proposed project site.

Birds of Conservation Concern

The project area is located within the Pacific Flyway, and various bird species are known to nest in and adjacent to the project area. Nesting birds, if present, could be directly or indirectly affected by construction activities. Direct effects could include mortality resulting from removal of a tree/shrub containing an active nest with eggs or chicks. Indirect effects could include nest abandonment by adults in response to loud noise levels or human encroachment, or a reduction in the amount of food available to young birds due to changes in feeding behavior by adults.

Construction activities in the developed park site would not directly affect nesting birds because improvements would occur in previously disturbed areas and no vegetation would be removed; indirect effects to nearby nesting habitats are not expected because birds that may nest adjacent to the developed park would be accustomed to periodic traffic noise and other human-induced disturbances.

Suitable nesting habitat is present in the developed park site, and there is a potential for direct and indirect impacts during construction. In the local area, most birds nest between February 1 and August 31. As required by **MM 4.4.2**, the potential for adversely affecting nesting birds can be greatly minimized by removing vegetation and conducting construction activities either before February 1 or after August 31.

If construction occurs during the nesting season, a nesting bird survey shall be conducted within one week prior to the removal of vegetation and/or the start of construction. If active nests are found in the project site, the District would implement measures to comply with the Migratory Bird Treaty Act and California Fish and Game Code. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists. Because construction activities that may indirectly impact nesting birds would cease at the completion of the project, and implementation of **MM 4.4.2** would reduce the potential for direct effects to nesting birds; the proposed project would have a less-than-significant impact on nesting birds.

Therefore, because **MM 4.4.1 and MM 4.4.2** are included to minimize/avoid potential impacts on special-status plants and protected species, impacts would be **less than significant**.

Questions B and C

According to CDFW, since the inception of the National Heritage Program in 1979, natural communities have been considered for their conservation significance (CDFW 2017). Unique natural communities were recorded in the CNDDB until the mid-1990's; at that time, funding for the natural community portion of the program was eliminated. Although natural communities are no longer being added to the CNDDB, many of the natural community occurrences maintained in the CNDDB still have significance for conservation, and their existence should be considered in the environmental review process.

The USFWS does not identify any critical habitats within the project area. The CNDDB identifies two sensitive natural communities within a five-mile radius of the project area. One of these communities, *Pit River Drainage Rough Sculpin/Shasta Crayfish Spring Stream,* is mapped in the Fall River adjacent to the study site. The other, *Lower Pit River/Canyon River (Hardhead/Tule Perch River)*, is mapped approximately 2.5 air miles southwest of the project area. No other sensitive natural communities were identified in the project sites.

Developed Park Site

A Delineation of Potentially Jurisdictional Wetlands, Waters of the United States, and Riparian Habitats was prepared for the developed park site in 2012 by Dittes & Guardino Consulting. The delineation identified the Pit River, Fall River, and a portion of the Fall River Pond adjacent to the developed park site. No wetlands or other potentially jurisdictional waters were identified in areas in which improvements are proposed in the developed park site; therefore, a Section 404 permit from the USACE, Section 401 permit from the Regional Water Quality Control Board (RWQCB), and Section 1600 permit from CDFW are not required.

Habitat degradation could occur if sediment-laden water enters wetlands or other waters adjacent to and/or downstream of the project area. To minimize the potential for inadvertent damage to wetlands and other waters, **MM 4.4.3** requires that exclusionary fencing be installed at the outer edge of the construction area where it abuts or approaches wetlands and other waters of the U.S. and State. The fencing shall be installed under the direction of a qualified biologist and shall be maintained throughout the construction period.

In addition, as identified in Section 1.6 (Required Permits and Approvals), the project is subject to issuance of a grading permit from Shasta County. Section 12.12.070 of the Shasta County Code requires implementation of BMPs to control erosion and sedimentation and prevent damage to off-site property, streams, watercourses, and aquatic habitats. BMPs may include, but are not limited to, use of straw wattles, silt fences, and/or gravel berms to prevent sediment from discharging off-site; and revegetating temporarily disturbed areas upon completion of construction. The final improvement plans would identify any permanent erosion control measures necessary to minimize the potential for long-term impacts, and a plan for ongoing maintenance of any required erosion control measures as necessary. With implementation of BMPs and **MM 4.4.3**, potential impacts during construction and operation would be less than significant.

Undeveloped Park Site

On August 31, 2021, a reconnaissance level field survey was conducted in the undeveloped park site by an ENPLAN biologist. The purpose of the survey was to identify possible wetlands and other water features that may be subject to USACE, RWQCB, and/or CDFW jurisdiction. No wetlands or other water features were identified in the undeveloped park site. As discussed above, BMPs for erosion and sediment control would be implemented as necessary to minimize potential indirect impacts on streams, watercourses, and aquatic habitats.

Potential Impacts from Invasive Weeds

The introduction and spread of noxious weeds during construction activities has the potential to adversely affect natural communities in the project area. As documented in the BSA, three noxious weeds were observed within the developed park site during the 2012 botanical field surveys: yellow star thistle, common mullein, and Himalayan blackberry. In addition, Eurasion watermilfoil is known to occur in lower Fall River. Noxious weeds observed in the project area are of widespread distribution in the County, thus further spread of these weeds to unaffected locations is not anticipated due to project implementation. However, other noxious weeds could be introduced into the project area if unwashed construction vehicles are used from outside of the County. With implementation of **MM 4.4.4**, impacts to sensitive natural communities as a result of the introduction and spread of noxious weeds would be less than significant.

As documented above, no direct impacts on sensitive natural communities, wetlands, or other waters would occur. With implementation of BMPs for erosion and sediment control in accordance with existing County requirements, and implementation of **MM 4.4.4,** impacts on natural communities would be less than significant.

Question D

Wildlife movement patterns can be disrupted by barriers (e.g., dams, reservoirs, highways, altered stream flows, urban development, habitat conversion, etc.) that impede the movement of migratory fish, birds, deer, and other wildlife species. In addition, during construction, increased human activity in the project area may impede the movement of wildlife.

Aquatic Species

The Pit and Fall Rivers adjacent to the project area support various fish, turtles, and waterfowl, and may provide suitable foraging/dispersal habitat for frogs, toads, and snakes. The project does not propose any in-water structures or temporary structures adjacent to the Fall or Pit Rivers. Therefore, there would be no impact to adjacent aquatic species.

Terrestrial Wildlife Species

The Shasta County General Plan identifies areas approximately 1.5 miles west and 2 miles south of the project area as critical deer winter ranges, which support migratory deer herds. No areas within 25 miles of the project area are identified as fall or spring holding areas, summer ranges, or fawning grounds. Because project implementation would have no effect on habitat outside of the project boundary, there would be no impact to deer winter ranges or fawning grounds.

A new gate would be installed at the entrance to the undeveloped park; however, wildlife passage would remain available around the gate. The project does not include construction or installation of any other permanent fencing or structures that could impede the movement of wildlife. Although daytime wildlife movement may be temporarily affected during the construction period, this impact would be of short duration and most animals can adapt by moving around the work area or moving during non-working hours. Potential permanent and temporary effects of construction on terrestrial wildlife movement would be less than significant.

Question E

Chapter 6.7 (Fish and Wildlife Habitat) of the Shasta County General Plan addresses the need to preserve unique and important aquatic, fish, wildlife habitats, and plant communities for their biological and ecological value, as well as for their direct and indirect benefits to the residents of Shasta County. **MM 4.4.1 through MM 4.4.4** are included to ensure consistency with the General Plan policies and objectives. There are no other local policies or ordinances related to the protection of biological resources that would apply to the proposed project. Impacts are considered less than significant with implementation of **MM 4.4.1 through MM 4.4.4**.

Question F

A Habitat Conservation Plan (HCP) is a federal planning document that is prepared pursuant to Section 10 of the Federal Endangered Species Act (FESA). A Natural Community Conservation Plan (NCCP) is a state planning document administered by CDFW. There are no HCPs, NCCPs, or other habitat conservation plans in the project area. Therefore, there would be no impact.

CUMULATIVE IMPACTS

Cumulative projects in the vicinity of the project area, including growth resulting from build-out of the County's General Plan, are anticipated to permanently remove plant and wildlife resources. As development in the area continues, sensitive plant and wildlife species native to the region and their habitat, including state and federally-listed special status species, will be lost through conversion of existing open space to urban development.

Although mobile species may have the ability to adapt to modifications to their environment by relocating, less mobile species could be locally extirpated. With continued conversion of natural habitat to human use, the availability and accessibility of remaining foraging and natural habitats in this ecosystem would dwindle, and those remaining natural areas may not be able to support additional plant or animal populations. The conversion of plant and wildlife habitat on a regional level as a result of cumulative development would potentially result in a regionally significant cumulative impact on special-status species and their habitats.

Implementation of BMPs for erosion and sediment control, and implementation of **MM 4.4.1** through **MM 4.4.3** would avoid, reduce, or mitigate potential impacts to special-status species and their habitats and migration corridors. With these measures, the proposed project's contribution to cumulative regional impacts to biological resources would be less than significant.

MITIGATION

MM 4.4.1 Prior to commencement of any earth disturbance (e.g., clearing, grading, trenching, etc.), a botanical survey of the undeveloped park site shall be conducted by a qualified biologist during the blooming period when special-status plants would be identifiable. The survey shall cover all areas in which improvements would occur, plus a suitable distance from the work areas to identify any special-status species that could be indirectly impacted by the project. In the event that special-status plant species are present, a suitable buffer zone(s) shall be determined by a qualified biologist in consultation with the applicable regulatory agency. High-visibility fencing, flagging, or other markers shall be placed along the outer edge of the buffer area to prevent accidental entry.

If avoidance is not possible, the Fall River Valley Community Services District shall consult with the applicable regulatory agency to determine a satisfactory method of mitigation. Typical mitigation includes collecting and propagating seeds, and replanting the seedlings in a protected area, or transplanting the individual plants to a protected area. A detailed mitigation plan shall be submitted to the applicable regulatory agency for review and approval. The plan shall identify the mitigation site, methods to be employed to create offsetting special-status plant habitat, success criteria, monitoring requirements, remedial measures, and/or other pertinent data to ensure successful replacement of the affected plant populations. Mitigation shall be undertaken concurrently with or in advance of the start of project construction.

MM 4.4.2 In order to avoid impacts to nesting birds and raptors protected under the federal Migratory Bird Treaty Act and California Fish and Game Code §3503 and §3503.5, including their nests and eggs, one of the following shall be implemented:

- a. Vegetation removal and other ground-disturbance activities associated with construction shall occur between September 1 and January 31 when birds are not nesting; or
- b. If vegetation removal or ground disturbance activities occur during the nesting season, a pre-construction nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area.

Surveys shall begin prior to sunrise and continue until vegetation and nests have been sufficiently observed. The survey shall consider acoustic impacts and line-of-sight disturbances occurring as a result of the project in order to determine a sufficient survey radius to avoid nesting birds. At a minimum, the survey report shall include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed in the area, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.).

The results of the survey shall be submitted electronically to the California Department of Fish and Wildlife upon completion at: R1CEQARedding@wildlife.ca.gov. The survey shall be conducted no more than one week prior to the initiation of construction. If construction activities are delayed or suspended for more than one week after the preconstruction survey, the site shall be resurveyed.

If active nests are found, the applicant shall consult with CDFW and/or the USFWS regarding appropriate actions needed to comply with the Migratory Bird Treaty Act and California Fish and Game Code §3503. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists.

- MM 4.4.3 Prior to commencement of any earth disturbance in the developed park (e.g., clearing, grading, trenching, etc.), high-visibility exclusionary fencing, flagging, or other markers shall be installed along the outer edges of wetlands and other waters of the U.S. and/or State that abut or approach construction areas. Fencing locations shall be determined by a qualified biologist in consultation with District staff. No construction activities (e.g., clearing, grading, trenching, etc.), including vehicle parking and materials stockpiling, shall occur within the fenced areas. The exclusionary fencing shall be periodically inspected by a qualified biologist throughout project construction to ensure the fencing is properly maintained. The fencing shall be removed upon project completion.
- MM 4.4.4 The potential for introduction and spread of noxious weeds shall be avoided/minimized by:
 - d. Using only certified weed-free erosion control materials, mulch, and seed.
 - e. Limiting any import or export of fill material to material that is known to be weed free.
 - f. Requiring the construction contractor to thoroughly wash all equipment at a commercial wash facility prior to entering the job site and upon leaving the job site.

DOCUMENTATION

California Department of Fish and Wildlife. 2019. California Regional Conservation Plans. https://wildlife.ca.gov/Conservation/Planning/NCCP. Accessed September 2021.

- **Dittes & Guardino Consulting.** 2012. Delineation of Potentially Jurisdictional Wetlands, Waters of the United States, and Riparian Habitats for the proposed Community Center and Park, Fall River Mills, Shasta County, California.
- Shasta County. 2004. Shasta County General Plan. https://www.co.shasta.ca.us/index/drm/planning/general-plan. Accessed August 2021
- **Spring Rivers Ecological Sciences, LLC.** 2012. Biological Resource Assessment, Fall River Valley Community Services District Community Center Park Project.
- U.S. Fish and Wildlife Service. 2020. Critical Habitat Map. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77. Accessed August 2021.

4.5 CULTURAL RESOURCES

Would the project:

Is	sues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		\boxtimes		
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		\boxtimes		
C.	Disturb any human remains, including those interred outside of dedicated cemeteries?		\boxtimes		

REGULATORY CONTEXT

FEDERAL

Section 106 of the National Historic Preservation Act (NHPA)

Section 106 of the NHPA and its implementing regulations require federal agencies to take into account the effects of their activities and programs on historic properties. A historic property is any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the National Register of Historic Places (NRHP), including artifacts, records, and material remains related to such a property (NHPA Sec. 301[5]). A resource is considered eligible for listing in the NRHP if it meets criteria defined in CFR Title 36, §60.4. Section 106 applies to projects undertaken by federal agencies or funded by a federal agency.

STATE

California Environmental Quality Act (CEQA)

CEQA requires that projects financed by or requiring the discretionary approval of public agencies in California be evaluated to determine potential adverse effects on historical and archaeological resources (California Code of Regulations [CCR], §15064.5). Historical resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance. Pursuant to §15064.5 of the CCR, a property may qualify as a historical resource if it meets any of the following criteria:

- a. The resource is listed in or determined eligible for listing in the California Register of Historical Resources (CRHR).
- b. The resource is included in a local register of historic resources, as defined in §5020.1(k) of the Public Resources Code (PRC), or is identified as significant in a historical resources survey that meets the requirements of §5024.1(g) of the PRC (unless the preponderance of evidence demonstrates that the resource is not historically or culturally significant).
- c. The lead agency determines that the resource may be a historical resource as defined in PRC §5020.1(j), or §5024.1, or may be significant as supported by substantial evidence in light of the whole record. Pursuant to PRC §5024.1, a resource may be eligible for inclusion in the CRHR if it:
 - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - Is associated with the lives of persons important in our past;
 - Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or
 - Has yielded, or may be likely to yield, information important in prehistory or history.

Resources must retain integrity to be eligible for listing on the CRHR. Resources that are listed in or formally determined eligible for listing in the NRHP are included in the CRHR, and thus are significant historical resources for the purposes of CEQA (PRC §5024.1(d)(1)). A unique archaeological resource means an artifact, object, or site that meets any of the following criteria:

- 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

LOCAL

Shasta County

The Shasta County General Plan includes the following Objective and Policy that apply to the proposed project:

Chapter 6.10	Chapter 6.10, Heritage Resources				
Objective:	HER-1	Protection of significant prehistoric and historic cultural resources.			
Policy:	HER-a	Development projects in areas of known heritage value shall be designed to minimize degradation of these resources. Where conflicts are unavoidable, mitigation measures which reduce such impacts shall be implemented. Possible mitigation measures may include clustering, buffer or nondisturbance zones, and building siting requirements.			

DISCUSSION OF IMPACTS

Questions A and B

Also see discussion in Section 4.18 (Tribal Cultural Resources)

Developed Park Site

Far Western Anthropological Research Group, Inc.

A Cultural Resources Inventory (CRI) for the Proposed Fall River Valley Community Center Project was completed by Eric Wohlgemuth with Far Western Anthropological Research Group, Inc. (Far Western), in August 2012. The CRI covered the entirety of the developed park property, and the eastern area of the undeveloped park property adjacent to the Fall River. The study included a records search, Native American consultation, and field evaluation.

The records search included review of records at the Northeast Information Center of the California Historical Resources Information System (NEIC); the National Register of Historic Places (NRHP), California Register of Historical Resources, California Historical Landmarks, California Inventory of Historic Resources, California Points of Historic Interest, Handbook of North American Indians, Vol. 8, Historic Spots in California, and Directory of Properties in the Historic Property Data Files for Shasta County.

In response to a request by Far Western, on July 11, 2012, the Native American Heritage Commission (NAHC) conducted a search of its Sacred Lands File; the search did not reveal any known Native American sacred sites or cultural resources in the project area. The NAHC also provided contact information for several Native American representatives and organizations, who were contacted by Far Western with a request to provide comments on the proposed project.

Fieldwork was conducted by Far Western on June 21 and July 1, 2012. Mary and David Mike, representatives of the Ajumawi Band of the Pit River Nation, participated in the fieldwork.

As a result of the Far Western CRI, four archaeological sites, an isolated resource, and 13 built resources (e.g., structures, foundations, culverts, water conveyance features, etc.) were documented and mapped.

ENPLAN

An Archaeological Survey Report (ASR) for the Cassel-Fall River Road Bridge Replacement Project was completed by ENPLAN archaeologists in 2016. Conclusions in the ASR were a result of a cultural resource inventory that was conducted between May 2010 and October 2015.

The ASR covered all areas in the developed park in which improvements would occur. The study included a records search, Native American consultation, and field evaluation. The ASR identified three historic structures in areas in which improvements would occur in the developed park site; however, these three structures have been demolished. Additional prehistoric and historic sites were identified in and adjacent to the developed park property but these sites would not be directly affected by the proposed improvements. Native American consultation for the bridge replacement project commenced in March 2010 and continued through to approval of the bridge replacement project in 2018. Mitigation measures were developed based on consultation with the Ajumawi Band of the Pit River Nation, and Ajumawi monitors will remain involved with monitoring for the bridge replacement project throughout the duration of construction activities.

Review of mapping completed by Far Western and ENPLAN confirmed that none of the proposed improvements in the developed park would impact any known cultural resource sites in the developed park. **MM 4.5.1** is included to address the inadvertent discovery of cultural resources during construction.

Undeveloped Park Site

Field surveys were completed for the undeveloped park site by an ENPLAN archaeologist on September 26, October 1, and October 3, 2021. The surveys covered the entirety of the undeveloped park site. As a result of the survey, several trash scatters and other historic and prehistoric resources were identified throughout the undeveloped park property. In addition, tribal cultural resources are known to occur in the general project area. The proposed improvements in

the undeveloped park have a potential to affect these resources. **MM 4.5.2** is included to ensure that improvements in the undeveloped park avoid impacts to known cultural resources by requiring that final plans for the undeveloped park site be reviewed by a qualified archaeologist prior to commencement of any earth disturbance. **MM 4.5.3** requires the District to request that the Ajumawi Band review the final plans to ensure avoidance of tribal cultural resources.

For both the developed and undeveloped park improvements, **MM 4.5.4** and **MM 4.5.5** are included to ensure that the Ajumawi Band of the Pit River Nation is provided an opportunity to monitor earth disturbing activities. Implementation of **MM 4.5.1** through **MM 4.5.5** ensures that impacts are **less than significant**.

Question C

The project area does not include any known cemeteries, burial sites, or human remains. However, it is possible human remains may be unearthed during construction activities. **MM 4.5.6** ensures if human remains are discovered, there shall be no further excavation or disturbance of the site until the County coroner has been contacted and has made the necessary findings as to origin and disposition in accordance with Section 15064.5(e) of the CEQA Guidelines. Therefore, impacts are **less than significant.**

CUMULATIVE IMPACTS

Cumulative projects in the vicinity of the project area have the potential to impact cultural resources. Archaeological and historic resources are afforded special legal protections designed to reduce the cumulative effects of development. Cumulative projects and the proposed project are subject to the protection of cultural resources afforded by the CEQA Guidelines Section 15064.5 and related provisions of the PRC. In addition, projects with federal involvement would be subject to Section 106 of the NHPA. Given the non-renewable nature of cultural resources, any impact to protected sites could be considered cumulatively considerable. As discussed above, no archaeological or historic resources would be impacted by the proposed project with implementation of MM 4.5.1 through MM 4.5.6, and the proposed project's cumulative impact to cultural resources is less than significant.

MITIGATION

- MM 4.5.1 In the event of any inadvertent discovery of cultural resources (i.e., burnt animal bone, midden soils, projectile points or other humanly-modified lithics, historic artifacts, etc.), all work within 50 feet of the find shall be halted until a professional archaeologist can evaluate the significance of the find in accordance with PRC §21083.2(g) and §21084.1, and CEQA Guidelines §15064.5(a). If any find is determined to be significant by the archaeologist, the District shall meet with the archaeologist to determine the appropriate course of action. If necessary, a Treatment Plan prepared by an archeologist outlining recovery of the resource, analysis, and reporting of the find shall be prepared. The Treatment Plan shall be reviewed and approved by the District prior to resuming construction.
- **MM 4.5.2** Prior to any ground-disturbing activities (e.g., clearing, grading, trenching, etc.) in the undeveloped park, the final site/design plan for the undeveloped park improvements shall be reviewed by a qualified archaeologist to ensure complete avoidance of known significant cultural resources.
- **MM 4.5.3** Prior to any ground-disturbing activities (e.g., clearing, grading, trenching, etc.) in the undeveloped park, the Fall River Valley Community Services District shall request that the Ajumawi Band of the Pit River Nation review the final site/design plan to ensure complete avoidance of significant tribal cultural resources.

- MM 4.5.4 A minimum of two weeks in advance of any ground-disturbing activities in either the developed or undeveloped park (e.g., clearing, grading, trenching, etc.), the Tribal Historic Preservation Officer of the Pit River Nation shall be notified and offered the opportunity for a Native American representative to monitor ground-disturbing activities.
- MM 4.5.5 In the event that cultural resources or human remains of Native American descent are identified during earth disturbance, the Ajumawi Band shall be requested to provide a Native American monitor to observe subsequent earth-disturbing construction activities on potentially sensitive lands.
- MM 4.5.6 In the event that human remains are encountered during construction activities, the District shall comply with §15064.5 (e) (1) of the CEQA Guidelines and PRC §7050.5. All project-related ground disturbance within 100 feet of the find shall be halted until the County coroner has been notified. If the coroner determines that the remains are Native American, the coroner will notify the NAHC to identify the most likely descendants of the deceased Native Americans. Project-related ground disturbance in the vicinity of the find shall not resume until the process detailed in §15064.5 (e) has been completed.

DOCUMENTATION

- **ENPLAN.** 2016. Archaeological Survey Report for the Cassel-Fall River Road Bridge Replacement Project over the Pit River, Shasta County, California.
- **Far Western Anthropological Research Group, Inc.** 2012. Cultural Resources Inventory for the Proposed Fall River Valley Community Center Project, Shasta County, California (confidential document on file with the NEIC).
- **Meyer, J.** 2013. A Geoarchaeological Overview and Assessment of Northeast California: Cultural Resources Inventory of Caltrans District 2 Rural Conventional Highways: Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama, and Trinity Counties, Vols. 1-2. Far Western Anthropological Research Group, Inc. Report on file at Caltrans District 2 Office, Redding.
- Shasta County. 2001. General Plan Chapter 6.10 Heritage Resources. https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/docs/6 10heritage.pdf?sfvrsn=5407829 0. Accessed August 2021

4.6 ENERGY

Would the Project:

Is	sues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?				
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				\boxtimes

REGULATORY CONTEXT

FEDERAL

There are no federal regulations pertaining to energy that apply to the proposed project.

STATE

Renewables Portfolio Standard

In 2002, SB 1078 was passed to establish the State's Renewables Portfolio Standard (RPS) Program, with the goal of increasing the amount of electricity generated and sold to retail customers from eligible renewable energy resources. The initial goal was to increase the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2017. The Renewables Portfolio Standard has been subsequently amended by the following actions:

Date	Legislation/Plan	Action
May 3, 2003	Energy Action Plan I	Accelerated the 20 percent renewable energy target to 2010.
September 21, 2005	Energy Action Plan II	Recommended a goal of 33 percent renewable energy by 2020.
September 26, 2006	SB 107	Codified the 20 percent renewable energy by 2010 target set forth in the Energy Action Plan I.
November 17, 2008	EO S-14-08 (Schwarzenegger)	Required 33 percent renewable energy by 2020 as recommended in the Energy Action Plan II.
September 15, 2009	EO S-21-09 (Schwarzenegger)	Directed the CARB to adopt regulations by July 31, 2010, consistent with the 33 percent renewable energy by 2020 target set forth in EO S-14-08.
April 12, 2011	Senate Bill X1-2	Codified the 33 percent renewable energy by 2020 target set forth in EO S-14-08; this new target applied to all electricity retailers in the state, including publicly owned utilities, investorowned utilities, electricity service providers, and community choice aggregators.
October 7, 2015	SB 350	Codified a target of 50 percent renewable energy by 2030. Also requires California utilities to develop integrated resource plans that incorporate a GHG emission reduction planning component beginning January 1, 2019.
September 10, 2018	SB 100	Codified targets of 60 percent renewable energy by 2030 and 100 percent renewable energy by 2045.

California Building Standards Code

Title 24 of the CCR, also known as the California Building Standards Code (CBSC), is based on the International Building Code (IBC) used widely throughout the country. The CBSC has been modified for California conditions to include more detailed and/or more stringent regulations. The CBSC consists of 13 parts, including the California Building Code, Energy Code, and Green Building Standards Code.

California Energy Code

The California Energy Code (Part 6 of the CBSC), also known as the State's Energy Efficiency Standards, was established by the California Building Standards Commission in 1978 with a goal of reducing California's energy consumption for residential and nonresidential buildings. The Standards include mandatory measures related to building envelopes, mechanical systems, indoor and outdoor lighting, and electrical power distribution. For all newly constructed nonresidential buildings over 10,000 square feet, building commissioning must be included in the design and construction process to verify that the building's energy systems and components meet State requirements for energy efficiency. The Standards are periodically updated by the California Energy Commission (CEC).

The 2019 update to the Energy Efficiency Standards became effective on January 1, 2020. The Initial Study prepared for the updated Standards estimates that implementation of the 2019 Standards will reduce the energy use of typical new residential buildings by about 7 percent and nonresidential buildings by about 31 percent compared to buildings constructed under the current standards. In addition, the 2019 Standards are projected to decrease water consumption by approximately 246 million gallons per year, reduce statewide annual electricity consumption by about 650 gigawatt-hours per year, and reduce statewide natural gas consumption by 9.8 million therms per year. Further, there could potentially be a net reduction in the emissions of nitrous oxide by roughly 100 metric tons per year, sulfur oxides by 0.27 metric tons per year, carbon monoxide by 28 metric tons per year, and (PM_{2.5}) by 3.36 metric tons per year. The 2019 Standards are also anticipated to reduce growth in statewide GHG emissions by 230,000 metric tons of carbon dioxide (CO2e) per year.

California Green Building Standards Code

In 2007, the California Building Standards Commission (CBSC) developed green building standards in an effort to meet the goals established by the Global Warming Solutions Act of 2006. These standards are referred to as the CALGreen Code and are included as Part 11 of the CBSC. The CALGreen Code, requires new residential and commercial buildings to comply with mandatory measures related to planning and design, energy efficiency, water efficiency/ conservation, material conservation, resource efficiency, and environmental quality. The most recent update to the CALGreen Code became effective January 1, 2020. Although it was adopted as part of the State's efforts to reduce GHG emissions, the CALGreen Code has the added benefit of reducing energy consumption from residential and nonresidential buildings that are subject to the Code.

California Environmental Quality Act (CEQA)

Section 15126.2(b) of the CEQA Guidelines states that if analysis of a project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, the effects must be mitigated. The Guidelines provide suggestions of topics that may be included in the energy analysis, including identification of energy supplies that would serve the project and energy use for all project phases and components. In addition to building code compliance, other relevant considerations may include the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. The energy use analysis may be included in related analyses of air quality, GHG emissions, transportation, or utilities at the discretion of the lead agency.

LOCAL

Shasta County

The Shasta County General Plan includes the following Objective that applies to the proposed project:

Chapter 6.4,	Chapter 6.4, Energy					
Objective:	E-2	Increase utilization of renewable energy resources by encouraging development of solar, hydroelectric, biomass, waste-to-energy, and cogeneration sources.				

DISCUSSION OF IMPACTS

Questions A and B

Also see discussion in Section 4.8 (Greenhouse Gas Emissions).

Construction-Related Energy Use

Energy consumption during construction would occur due to the use of diesel and gasoline fuel for construction equipment, haul trucks, and construction workers travelling to and from the work site. In addition, electrical power may be used during certain phases of construction. The use of electricity during construction would be minimal and would not be considered wasteful, inefficient, or unnecessary. Construction equipment would comply with regulations that restrict idling when not in use (see MM 4.3.1(h)). Construction equipment must also comply with State regulations that require the use of fuel-efficient equipment. With implementation of MM 4.3.1(h), and compliance with existing State regulations that require the use of fuel-efficient equipment, impacts during construction would be less than significant.

Operational Energy

Energy use for the proposed project would be limited to lighting and associated components of the public restroom and pumps for operation of the drinking fountain. As discussed under Regulatory Context above, the proposed project must comply with applicable State building and energy codes that were established to reduce the State's energy consumption and provide energy efficiency for residential and nonresidential buildings. The Code includes mandatory measures for planning and design, energy efficiency, water efficiency/conservation, material conservation, resource efficiency, and environmental quality. Further, as stated above, it is conservatively estimated that solar panels would offset about 85 percent of the energy demand for the proposed project.

Therefore, the project's operational energy-related impacts would be less than significant because the proposed project does not include any energy-intensive stationary sources or operational activities that would result in wasteful, inefficient, or unnecessary consumption of energy resources, and construction documents would be reviewed by the County's Building Official to ensure that all State mandatory energy efficiency measures are implemented.

Therefore, the project would have no impact associated with the wasteful, inefficient, or unnecessary consumption of energy either during project construction or operation.

Question B

As stated under Regulatory Context above, the County's General Plan includes the objective to use alternative energy sources. The State's Energy Efficiency standards require that newly constructed nonresidential buildings have an allocated solar zone that is free of obstructions and is not shaded. The solar zone identifies a suitable location for installation of photovoltaic (PV) solar panels or solar

water-heating (SWH) systems. In addition, the Energy Standards require that the construction documents depict a plan for connecting a PV and SWH system to the electrical or plumbing system of a building. For areas of the roof designated as a solar zone, the plans must also clearly indicate the structural design loads for roof dead load and roof live load.

The proposed project includes the installation of solar panels on the picnic pavilion structure to offset energy use associated with the restroom and drinking fountain. In addition, as stated under Question A, the County's Building Official will review all construction documents to ensure that the proposed project implements the State's mandatory energy efficiency measures. Compliance with these measures will ensure that the proposed project does not conflict with or obstruct a State of local plan for renewable energy or energy efficiency; there would be **no impact.**

CUMULATIVE IMPACTS

Completion of the proposed project and other potential cumulative projects in the region, including growth resulting from build-out of the County's General Plan, could result in potentially significant impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources. However, as stated under Regulatory Context, all new development projects in the State are required to comply with the State's Energy Efficiency Standards. These regulations are intended to reduce the potential for cumulative impacts related to energy use and GHG emissions. The Initial Study prepared for the 2019 Energy Efficiency Standards estimates that implementation of the 2019 Standards will reduce statewide annual electricity consumption by about 653 gigawatt-hours per year, and natural gas consumption by 9.8 million therms per year.

Because all new development projects in the County must comply with the State's energy efficiency standards, the proposed project's cumulative impacts on energy resources would be less than significant.

MITIGATION

Implementation of MM 4.3.1(h).

DOCUMENTATION

California Energy Commission. 2019. 2019 Nonresidential Compliance Manual for the 2019 Building Energy Efficiency Standards. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency. Accessed August 2021.

4.7 GEOLOGY AND SOILS

Would the project:

Is	sues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving: i) Rupture of a known earthquake fault, as delineated on		П		
	the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.]		
	ii) Strong seismic ground shaking?			\boxtimes	
	iii) Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv) Landslides?			\boxtimes	
b.	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
C.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		\boxtimes		

REGULATORY CONTEXT

FEDERAL

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction (NEHR) Act was passed in 1977 to reduce the risks to life and property from future earthquakes in the United States. The Act established the National Earthquake Hazards Reduction Program, which was most recently amended in 2004. The Federal Emergency Management Agency (FEMA) is designated as the lead agency of the program. Other NEHR Act agencies include the National Institute of Standards and Technology, National Science Foundation, and the U.S. Geological Survey (USGS).

STATE

California Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (PRC §2621 *et seq.*) was passed in 1972 to reduce the risk to life and property from surface faulting in California. The Act prohibits the siting of most structures

intended for human occupancy on the surface trace of active faults. Before a project can be permitted in a designated Alquist-Priolo Fault Study Zone, a geologic investigation must be prepared to demonstrate that proposed buildings would not be constructed across active faults.

California Seismic Hazards Mapping Act

The California Seismic Hazards Mapping Act (SHMA) of 1990 (PRC §2690–2699.6) addresses non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, and seismically induced landslides. The SHMA also addresses expansive soils, settlement, and slope stability. Under the SHMA, cities and counties may withhold development permits for sites within seismic hazard areas until geologic/geotechnical investigations have been completed and measures to reduce potential damage have been incorporated into development plans.

California Building Standards Code

As discussed in Section 4.6, the CBSC consists of 13 parts, including the California Building Code, Energy Code, Fire Code, and Green Building Standards Code. Part 2 of the CBSC is the California Building Code (CBC) that includes standards for structural design, excavation, grading, seismic design, drainage, and erosion control.

LOCAL

Shasta County

The Shasta County General Plan includes the following Objectives and Policies that apply to the proposed project:

Chapter 5.1,	Seismic and	Geologic Hazards
Objectives:	SG-1	Protection of all development from seismic hazards by developing standards for the location of development relative to these hazards; and protection of essential or critical structures, such as schools, public meeting facilities, emergency services, high-rise and high-density structures, by developing standards appropriate for such protection.
	SG-2	Protection of development on unstable slopes by developing standards for the location of development relative to these hazards.
	SG-3	Protection of development from other geologic hazards, such as volcanoes, erosion, and expansive soils.
	SG-4	Protection of waterways from adverse water quality impacts caused by development on highly erodible soils.
Policies:	SG-e	When soil tests reveal the presence of expansive soils, engineering design measures designed to eliminate or mitigate their impacts shall be employed.

DISCUSSION OF IMPACTS

Question A

i and ii)

According to the Alquist-Priolo Earthquake Fault Zoning Map, the nearest Alquist-Priolo Fault is the McArthur Fault Zone, located approximately 3.3 miles east of the project area. According to the California Department of Conservation (DOC), one potentially active fault line, the Hat Creek fault, bisects the undeveloped park site. The Hat Creek fault line is located within the greater Fall River fault zone and is considered well constrained. There are two potentially active unnamed

faults located southeast and west of the project area. Both are considered well- and moderately-constrained faults. According to the County's Hazard Mitigation Plan, the project area is potentially subject to ground shaking from faults located in and adjacent to the project site. However, there has been no significant damage or loss of life due to earthquakes in or near the County, and there have been no reported surface ruptures in the immediate project area.

As stated under Regulatory Context above, the CBC provides minimum standards for building design and construction, including seismic design. It is the responsibility of the County's Building Official to ensure that buildings are designed in accordance with State regulations for seismic safety. Compliance with existing building code standards ensures that impacts are **less than significant.**

iii)

Liquefaction results from an applied stress on the soil, such as earthquake shaking or other sudden change in stress condition, and is primarily associated with saturated, cohesionless soil layers located close to the ground surface. During liquefaction, soils lose strength, and ground failure may occur. Building foundations can sink, break apart or tilt, and gravity-fed pipelines can back up. This is most likely to occur in alluvial deposits (geologically recent, unconsolidated sediments), stream channel deposits, and glacial outwash deposits, especially when the groundwater table is high. As shown in **Table 4.7-1**, the soil types within the project area may be prone to liquefaction.

The soil type in areas where the restroom and pavilion structure would be built is Pittville sandy loam, 0-5 percent slopes, which consists of stream terraces characterized as alluvium derived from extrusive igneous rock. In accordance with CBC Chapter 18 (Soils and Foundations), the County Building Official has the discretion to require that a site-specific geotechnical report be submitted with the building permit application for the new structures. The geotechnical report would evaluate potential geologic and seismic hazards, including slope instability, liquefaction, total and differential settlement, and surface displacement due to faulting or seismically induced lateral spreading or lateral flow. Because the County's Building Official will ensure that applicable building code requirements are incorporated into the building design, potential impacts associated with seismic-related ground failure would be **less than significant**.

TABLE 4.7-1 Soil Type and Characteristics

Soil Name	Landform and Parent Material	Erosion Potential	Drainage	Surface Runoff	Permeability	Shrink- Swell Potential
Jellycamp-Lassen- Longcreek complex, 2- 15 percent slopes	Lava plateaus; Alluvium derived from igneous rock	Low or moderate	Moderately well drained	Slow or medium	Very slow	High
Jellycamp-Ollierivas complex, 2-9 percent slopes	Lava plateaus; Alluvium derived from igneous rock	Low	Moderately well drained	Medium	Very slow	High
Pittville sandy loam 0-5 percent slopes	Stream terraces; Alluvium derived from extrusive igneous rock	Low	Well drained	Slow	Moderately slow	Moderate

Source: U.S. Department of Agriculture, Natural Resources Conservation Service, 2021.

iv)

According to the County's Hazard Mitigation Plan, there are a few steep, denuded slopes in various locations around the Fall River Mills area where small landslides have occurred during heavy rainfall events; however, there are no documented landslides in the project area.

Earthwork that alters the shape of a slope or imposes new loads on an existing slope could increase the potential for landslides. However, areas in which structures would be built (i.e., the restroom and pavilion structure) are relatively flat with little risk of landslides; therefore, impacts would be **less than significant.**

Question B

Construction of the proposed project would involve excavation, grading, and installation of project components, which would result in the temporary disturbance of soil and would expose disturbed areas to potential storm events. This could generate accelerated runoff, localized erosion, and sedimentation. In addition, construction activities could expose soil to wind erosion that could adversely affect on-site soils and the re-vegetation potential of the area.

As shown in **Table 4.7-1**, soils on the project site have a low to moderate potential for erosion. However, as identified in Section 1.6 (Required Permits and Approvals) and discussed in Section 4.4 under Questions B and C, BMPs to control erosion and sedimentation and prevent damage to off-site property, streams, watercourses, and aquatic habitats must be implemented in accordance with section 12.12.070 of the Shasta County Code. Because BMPs for erosion and sediment control would be implemented in accordance with existing requirements, the potential for soil erosion and loss of top soil would be **less than significant.**

Questions C and D

See discussion under Questions A and Question B above.

Unstable soils consist of loose or soft deposits of sands, silts, and clays. In addition, some soils have a potential to swell when they absorb water and shrink when they dry out. These expansive soils generally contain clays that expand when moisture is absorbed into the crystal structure. When these soils swell, the change in volume can exert significant pressure on loads that are upon them, such as buildings or underground utilities. As stated above, the soil type in areas where the restroom and pavilion structure would be built is Pittville sandy loam, 0-5 percent slopes, which has a moderate shrink-swell potential.

As stated above, the project must comply with CBC requirements, and the County Building Official may require completion of a geotechnical report to evaluate potential geologic and seismic hazards on the project site. The geotechnical report would include recommendations for building foundations, structural systems, ground stabilization, and/or other measures applicable to soils and geological conditions in the project site. Because the County's Building Official will ensure that applicable building code requirements are incorporated into the building design, potential impacts associated with unstable and/or expansive soils would be **less than significant.**

Question E

The project does not propose the installation or use of alternative wastewater disposal systems. Therefore, there would be **no impact.**

Question F

As stated above, the project site includes three soil types: Jellycamp-Lassen-Longcreek complex, 2-15 percent slopes; Jellycamp-Ollierivas complex, 2-9 percent slopes; and Pittville sandy loam 0-5 percent slops. According to Meyer's (2013) soil reference, the Fall River Mills area contains Tertiary volcanic flow rocks and quarternary volcanic flow rocks which date to multiple volcanic eruptions during the late Cenozoic period, also known as the Quarternary period (2.6 million years ago to present). Volcanic rock deposits typically overlay older igneous rocks. Quarternary soil materials are assigned a low paleontological resource sensitivity due to their relatively recent age, high-energy formation/deposition environment, and the fact that, with rare exceptions, significant fossil occurrences are unknown from alluvial deposits.

Although there is no record of paleontological resources in the project area, and there are no unique geological features in the project site, there is always some potential for previously unknown paleontological resources to be encountered during site excavation. Implementation of **MM 4.7.1** would ensure that potential impacts due to inadvertent discoveries of paleontological resources would be **less than significant.**

CUMULATIVE IMPACTS

Completion of the proposed project and other potential cumulative projects in the region could result in increased erosion and soil hazards and could expose additional structures and people to seismic hazards. However, these impacts can be fully mitigated with implementation of construction-related erosion control programs and with the incorporation of standard seismic safety and engineering design measures; therefore, cumulative impacts are **less than significant.**

MITIGATION

MM 4.7.1 If paleontological resources (fossils) are discovered during construction, all work within 50 feet of the find shall be halted until a professional paleontologist can evaluate the significance of the find. If any find is determined to be significant by the paleontologist, the District shall meet with the paleontologist to determine the appropriate course of action. If necessary, a Treatment Plan prepared by a paleontologist outlining recovery of the resource, analysis, and reporting of the find shall be prepared. The Treatment Plan shall be reviewed and approved by the District prior to resuming construction.

DOCUMENTATION

- **Meyer, Jack**. 2013. A Geoarchaeological Overview and Assessment of Northeast California: Cultural Resources Inventory of Caltrans District 2 Rural Conventional Highways: Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama, and Trinity Counties, Vols. 1-2. Far Western Anthropological Research Group, Inc. Report on file at Caltrans District 2 Office, Redding.
- State of California, Department of Conservation, California Geological Survey. 2019. Earthquake Zones of Required Investigation. https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed August 2021.
- _____. California Geological Survey. 2007. Special Publication 42, Interim Revision 2007. Fault-Rupture Hazard Zones in California. https://www.conservation.ca.gov/cgs/alquist-priolo. Accessed August 2021.
- ____. 2010 Geologic Map of California. https://www.conservation.ca.gov/cgs/Pages/Program-RGMP/2010_geologicmap.aspx. Accessed August 2021.
- **U.S.** Department of Agriculture, Natural Resource Conservation Service. 2021. Web Soil Survey. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed August 2021.
- U.S. Geological Survey. 2019. Interactive Fault Map.
 https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf884
 12fcf. Accessed August 2021.
- **Shasta County.** 2004. Shasta County General Plan, Chapter 5.1 (Seismic and Geologic Hazards). http://www.co.shasta.ca.us/docs/Resource_Management/docs/51seismic.pdf?sfvrsn=0. Accessed August 2021.

4.8 GREENHOUSE GAS EMISSIONS

Would the project:

	Issues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				\boxtimes

REGULATORY CONTEXT

FEDERAL

U.S. Environmental Protection Agency

On April 2, 2007, in *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court found that greenhouse gas emissions (GHGs) are air pollutants covered by the federal Clean Air Act (CAA). In reaching its decision, the Court also acknowledged that climate change is caused, in part, by human activities. The Supreme Court's ruling paved the way for the regulation of GHG emissions by the USEPA under the CAA. The USEPA has enacted regulations that address GHG emissions, including, but not limited to, mandatory GHG reporting requirements, carbon pollution standards for power plants, and air pollution standards for oil and natural gas.

STATE

California Executive Order (EO) S-3-05

EO S-03-05 was signed by the Governor on June 1, 2005, and established the goal of reducing statewide GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

Assembly Bill 32 (Global Warming Solutions Act of 2006)

As required by AB 32 (2006), CARB adopted the initial Climate Change Scoping Plan in 2008 that identified the State's strategy to achieve the 2020 GHG emissions limit via regulations, market-based mechanisms, and other actions. AB 32 requires that the Scoping Plan be updated every five years. CARB's first update to the Climate Change Scoping Plan (2014) addressed post-2020 goals and identified the need for a 2030 mid-term target to establish a continuum of actions to maintain and continue reductions. Executive Order B-30-15 (2015) extended the goal of AB 32 and set a GHG reduction goal of 40 percent below 1990 levels by 2030. In December 2017, CARB adopted the second update to the Scoping Plan that includes strategies to achieve the 2030 mid-term target and substantially advance toward the 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

The 2017 Scoping Plan Update recommends that local governments aim to achieve a community-wide goal of no more than 6 MT CO₂e per capita by 2030 and no more than 2 MT CO₂e per capita by 2050, which is consistent with the State's long-term goals.

Senate Bill 32/Assembly Bill 197

These two bills were signed into legislation on September 8, 2016. As set forth in EO B-30-15, SB 32 requires CARB to reduce GHG emissions to 40 percent below the 1990 levels by 2030. AB 197 requires

that GHG emissions reductions be achieved in a manner that benefits the state's most disadvantaged communities. AB 197 requires CARB to prioritize direct GHG emission reductions in a manner that benefits the state's most disadvantaged communities and to consider social costs when adopting regulations to reduce GHG emissions. AB 197 also provides more legislative oversight of CARB by adding two new legislatively appointed non-voting members to the CARB Board and limiting the term length of Board members to six years.

Renewables Portfolio Standard

In 2002, SB 1078 was passed to establish the State's Renewables Portfolio Standard (RPS) Program, with the goal of increasing the amount of electricity generated and sold to retail customers from eligible renewable energy resources. The initial goal was to increase the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2017. SB 350 (2015) codified a target of 50 percent renewable energy by 2030, and requires California utilities to develop integrated resource plans that incorporate a GHG emission reduction planning component beginning January 1, 2019. SB100 (2018) codified targets of 60 percent renewable energy by 2030 and 100 percent renewable energy by 2045.

California Executive Order B-55-18

EO B-55-18 was issued by the Governor on September 10, 2018. It sets a statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets.

Senate Bill 375 (Sustainable Communities and Climate Protection Act of 2008)

Under SB 375, the CARB sets regional targets for the reduction of GHG emissions from passenger vehicles and light duty trucks. Each Metropolitan Planning Organization (MPO) in the State, or Regional Transportation Planning Agency for regions without a MPO, must include a Sustainable Communities Strategy in the applicable Regional Transportation Plan that demonstrates how the region will meet the GHG emissions reduction targets.

Mobile Source Strategy

CARB's Mobile Source Strategy, adopted in 2016, describes the State's strategy for containing air pollutant emissions from vehicles, and quantifies growth in vehicle miles traveled that is compatible with achieving state climate targets. The Strategy demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risks from transportation emissions, and reduce petroleum consumption over the next fifteen years.

Senate Bill 210 (2019), Heavy-Duty Vehicle Inspection and Maintenance Program

Under SB 210, heavy-duty diesel trucks will have to pass a smog check to ensure vehicle emission controls are maintained in order to register or operate in California. Upon implementation of the Program, CARB must provide mechanisms for out-of-state owners of heavy-duty vehicles to establish and verify compliance with State regulations for heavy-duty diesel trucks prior to entering the State.

Senate Bill 44 (2019), Medium- and Heavy-Duty Vehicles: Comprehensive Strategy

SB 44 requires CARB to update the State's Mobile Source Strategy no later than January 1, 2021, to include a comprehensive strategy to reduce emissions from medium- and heavy-duty vehicles in order to meet federal ambient air quality standards and reduce GHG emissions from this sector. The Bill also requires CARB to establish emission reduction goals for 2030 and 2050 for medium- and heavy-duty vehicles.

California Green Building Standards Code

In 2007, the California Building Standards Commission (CBSC) developed green building standards in an effort to meet the goals established by the Global Warming Solutions Act of 2006 to reduce GHG

emissions. These standards are referred to as the CALGreen Code and are included as Part 11 of the CBSC.

New residential and nonresidential buildings must comply with mandatory measures related to planning and design (e.g., install secure bicycle parking facilities, designated parking for clean air vehicles, improvements to facilitate the future installation of electric vehicle supply equipment, light pollution reduction, etc.), energy efficiency, water efficiency/conservation (e.g., water efficient landscaping, low-flow plumbing fixtures, etc.), material conservation/resource efficiency (weather protection, construction waste reduction/recycling, recycling facilities for building occupants, building commissioning, systems testing, etc.). The local Building Official is responsible for ensuring compliance with the CALGreen Code.

CEQA Guidelines

§15064.4 of the California Environmental Quality Act (CEQA) Guidelines states that the lead agency should focus its GHG emissions analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A lead agency has the discretion to determine whether to use a model or methodology to quantify GHG emissions or to rely on a qualitative or performance-based standard.

The GHG analysis should consider: 1) the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting, 2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project, and 3) the extent to which the project complies with any regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an Environmental Impact Report (EIR) must be prepared for the project. To determine transportation-generated greenhouse gas emissions in particular, lead agencies may determine that it is appropriate to use the same method used to determine the transportation impacts associated with a project's VMT.

In Center for Biological Diversity v. California Department of Fish and Wildlife (2015) 62 Cal.4th 204, which involved the Newhall Ranch project, the California Supreme Court concluded that a legally appropriate approach to assessing the significance of GHG emissions was to determine whether a project was consistent with "'performance based standards' adopted to fulfill 'a statewide . . . plan for the reduction or mitigation of greenhouse gas emissions' (CEQA Guidelines §15064.4(a)(2), (b)(3)... §15064(h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including 'plans or regulations for the reduction of greenhouse gas emissions'1.)" (62 Cal.4th at p. 229.)

Greenhouse Gases Defined

Table 4.8-1 provides descriptions of the GHGs identified in California Health and Safety Code §38505(g).

TABLE 4.8-1 Greenhouse Gases

Greenhouse Gas	Description
Carbon dioxide (CO ₂)	Carbon dioxide (CO ₂) is the primary greenhouse gas emitted through human activities. In 2014, CO ₂ accounted for about 80.9 percent of all U.S. greenhouse gas emissions from human activities. The main human activity that emits CO ₂ is the combustion of fossil fuels (coal, natural gas, and oil) for energy and transportation, although certain industrial processes and land-use changes also emit CO ₂ .

Greenhouse Gas	Description
Methane (CH ₄)	Methane (CH ₄) is the second most prevalent greenhouse gas emitted in the United States from human activities. Methane is emitted by natural sources such as wetlands, as well as human activities such as the raising of livestock; the production, refinement, transportation and storage of natural gas; methane in landfills as waste decomposes; and in the treatment of wastewater.
Nitrous oxide (N ₂ O)	In 2014, nitrous oxide (N ₂ O) accounted for about 6 percent of all U.S. greenhouse gas emissions from human activities. Nitrous oxide is naturally present in the atmosphere as part of the Earth's nitrogen cycle.
	Human activities such as agricultural soil management (adding nitrogen to soil through use of synthetic fertilizers), fossil fuel combustion, wastewater management, and industrial processes are also increasing the amount of N ₂ O in the atmosphere.
Hydrofluorocarbons (HFCs)	Hydrofluorocarbons (HFCs) are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products such as refrigerants, aerosol propellants, solvents, and fire retardants. They are released into the atmosphere through leaks, servicing, and disposal of equipment in which they are used.
Perfluorocarbons (PFCs)	Perfluorocarbons (PFCs) are colorless, highly dense, chemically inert, and nontoxic. There are seven PFC gases: perfluoromethane (CF4), perfluoroethane (C_2F_6), perfluoropropane (C_3F_8), perfluorobutane (C_4F_{10}), perfluorocyclobutane (C_4F_8), perfluoropentane (C_5F_{12}), and perfluorohexane (C_6F_4).
	Perfluorocarbons are produced as a byproduct of various industrial processes associated with aluminum production and the manufacturing of semiconductors.
Sulfur hexafluoride (SF ₆)	Sulfur hexafluoride (SF $_6$) is an inorganic compound that is colorless, odorless, nontoxic, and generally nonflammable. SF $_6$ is primarily used in magnesium processing and as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80 percent of all SF $_6$ produced worldwide.
Nitrogen trifluoride (NF ₃)	Nitrogen trifluoride is a colorless, odorless, nonflammable gas that is highly toxic by inhalation. It is one of several gases used in the manufacture of liquid crystal flat-panel displays, thin-film photovoltaic cells and microcircuits.

LOCAL

Shasta County

Shasta County developed a draft Shasta Regional Climate Action Plan in August 2012. The plan shows that the County would achieve a reduction in GHG emissions in the year 2020 below 2008 business as usual (BAU) emissions with the implementation of state and federal reduction measures. The CAP provides additional GHG reduction measures to further reduce GHG emissions beyond 2020. The County has not adopted thresholds of significance for greenhouse gases. According to SCAQMD staff, the District's greenhouse gas policy is to quantify, minimize, and mitigate greenhouse gas emissions, as feasible.

DISCUSSION OF IMPACTS

Question A

Gases that trap heat in the atmosphere create a greenhouse effect that results in global warming and climate change. These gases are referred to as greenhouse gases (GHGs). As described in **Table 4.8-1**, some GHGs occur both naturally and as a result of human activities, and some GHGs are exclusively the result of human activities.

The atmospheric lifetime of each GHG reflects how long the gas stays in the atmosphere before natural processes (e.g., chemical reactions) remove it. A gas with a long lifetime can exert more warming influence than a gas with a short lifetime. In addition, different GHGs have different effects on the atmosphere. For this reason, each GHG is assigned a global warming potential (GWP) which is a measure of the heat-trapping potential of each gas over a specified period of time.

Gases with a higher GWP absorb more heat than gases with a lower GWP, and thus have a greater effect on global warming and climate change. The GWP metric is used to convert all GHGs into CO₂ equivalent (CO₂e) units, which allows policy makers to compare impacts of GHG emissions on an equal basis. The GWPs and atmospheric lifetimes for each GHG are shown in **Table 4.8-2**.

TABLE 4.8-2
Greenhouse Gases: Global Warming Potential and Atmospheric Lifetime

GHG	GWP (100-year time horizon)	Atmospheric Lifetime (years)
CO ₂	1	50 -200
CH ₄	25	12
N ₂ O	298	114
HFCs	Up to 14,800	Up to 270
PFCs:	7,390-12,200	2,600 - 50,000
SF ₆	22,800	3,200
NF ₃	17,200	740

Source: U.S. Environmental Protection Agency, 2020.

Thresholds of Significance

As stated under Regulatory Context, §15064.4 of the CEQA Guidelines gives lead agencies the discretion to determine whether to use a model or other method to quantify GHG emissions and/or to rely on a qualitative or performance-based standard.

For a quantitative analysis, a lead agency could determine a less-than-significant impact if a project did not exceed an established numerical threshold. For a qualitative/performance-based threshold, a lead agency could determine a less-than-significant impact if a project complies with State, regional, and/or local programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

If a qualitative approach is used, lead agencies should still quantify a project's construction and operational GHG emissions to determine the amount, types, and sources of GHG emissions resulting from the project. Quantification may be useful in indicating to the lead agency and the public whether emissions reductions are possible, and if so, from which sources.

For example, if quantification reveals that a substantial portion of a project's emissions result from mobile sources (automobiles), a lead agency may consider whether design changes could reduce the project's vehicle miles traveled (OPR, 2018).

Neither the District nor Shasta County have adopted numerical thresholds of significance or performance-based standards for GHG emissions. Numerical thresholds that have been referenced for other projects in the region range from 900 MT/year CO₂e (Tehama County) to 1,100 MT/year CO₂e for both construction and operational emissions and 10,000 MT/year CO₂e for stationary sources (various communities in the Sacramento Valley and Northeast Plateau air basins). For this project, the District has determined that a conservative threshold of 900 MT/year CO₂e is appropriate.

Project GHG Emissions

Project emissions were estimated using Version 2020.04.0 of the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide model designed to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, and water use.

Site-specific inputs and assumptions for the project include, but are not limited to, the following. Output files, including all site-specific inputs and assumptions, are provided in **Appendix A**.

- Emissions from construction are based on all construction-related activities, including but not limited to site preparation, grading, use of construction equipment, material hauling, and paving.
- Emissions from operation of the proposed project are based on all proposed and future operational activities, including vehicle traffic, water use, solid waste disposal, use of architectural coatings (paint), etc.
- Construction would start in May 2022 and occur over a period of eight months.
- Total land disturbance would be approximately 0.8 acres. 750 cubic yards (CY) of dirt would be imported; no dirt would be exported.
- The total area to be paved would be 0.23 acres.
- It is conservatively estimated that the solar panels would generate 85 percent of the energy required to operate the restroom and the drinking fountain.

Construction of the proposed project would emit GHG emissions, primarily from the combustion of diesel fuel in heavy equipment. Operational GHG emissions would be attributed primarily to mobile sources (vehicle trips for visitors to the park), indirect emissions associated with water and wastewater treatment, and solid waste disposal, and area sources (e.g., painting, landscape maintenance, and use of cleaning supplies). Estimated GHG emissions for the project are shown in **Table 4.8-3.** As indicated, construction emissions are amortized over the life of the project, defined as 30 years, and added to the operational emissions.

Table 4.8-3
Estimated Annual Greenhouse Gas Emissions

Total Construction Emissions (Metric Tons)									
Source	Carbon Dioxide (CO ₂)			Carbon Dioxide Equivalent (CO₂e)					
Operational	37.3	0.04	Trace	38.97					
Construction (Amortized over 30 years)	4.15	0.001	Trace	4.19					
Total	41.45	0.041	Trace	43.16					

Source: CalEEMod, 2021. Totals may not add due to rounding.

As indicated in **Table 4.8-3**, the project would not exceed the numerical threshold of 900 MT/year $CO_{2}e$. Although the project may result in more vehicles travelling to the park, it is anticipated that primary use of the park would be by local residents and there would not be a significant increase in vehicle miles travelled. Further, it is estimated that the proposed solar panels would offset about 85 percent of operational energy use. Therefore, potential impacts associated with GHG emissions would be less than significant.

Question B

See discussion under Regulatory Context and Question A above. There are no adopted local plans associated with GHG emissions. The District would ensure compliance with applicable State regulations adopted for the purpose of reducing GHG emissions through contractual obligations. The County's Building Official is responsible for ensuring implementation of the CALGreen Code and other applicable building codes. Therefore, the project would not conflict with a plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

CUMULATIVE IMPACTS

GHG emissions and global climate change are, by nature, cumulative impacts. Unlike criteria pollutants, which are pollutants of regional and local concern, GHGs are global pollutants and are not limited to the area in which they are generated. As discussed under Regulatory Context above, the State legislature has adopted numerous programs and regulations to reduce statewide GHG emissions. As documented above, project implementation would not exceed the referenced numerical threshold of 900 MT/year CO₂e, and there would be a minimal increase in VMT and energy use. Therefore, the proposed project's contribution to cumulative GHG emissions would be less than significant.

MITIGATION

None necessary.

DOCUMENTATION

- California Air Resources Control Board. 2020. Mobile Source Strategy Updates. https://ww2.arb.ca.gov/resources/documents/2020-mobile-source-strategy. Accessed August 2021.
- California Energy Commission. 2019. 2019 Nonresidential Compliance Manual for the 2019 Building Energy Efficiency Standards. <a href="https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-
- California Environmental Protection Agency, Air Resources Board. AB 32 Scoping Plan Website. https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm. Accessed August 2021.
- ____. 2017. Short-Lived Climate Pollutant Reduction Strategy.

 https://ww2.arb.ca.gov/sites/default/files/2018-12/final_slcp_report%20Final%202017.pdf.

 Accessed August 2021.
- California Office of Planning and Research. 2018. Discussion Draft: CEQA and Climate Change Advisory. http://opr.ca.gov/docs/20181228-Discussion_Draft_Climate_Change_Adivsory.pdf. Accessed August 2021.
- **Shasta County.** 2012. Draft Shasta Regional Climate Action Plan. http://www.co.shasta.ca.us/index/drm_index/aq_index/programs/RCAP/Draft_RCAP.aspx. Accessed March 2021.
- **United States Environmental Protection Agency.** 2019. Overview of Greenhouse Gases. https://www.epa.gov/ghgemissions/overview-greenhouse-gases. Accessed August 2021

_____. 2019. Understanding Global Warming Potentials.

https://www.epa.gov/ghgemissions/understanding-global-warming-potentials. Accessed August 2021.

University of California, Berkeley Law. 2021. California Climate Policy Dashboard. https://www.law.berkeley.edu/research/clee/research/climate/climate-policy-dashboard/. Accessed March 2021.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

ls	ssues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?				
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			\boxtimes	
C.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?				
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e.	For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f.	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?				
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?		\boxtimes		

REGULATORY CONTEXT

FEDERAL

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) is the primary federal law for the regulation of solid waste and hazardous waste in the United States and provides for the "cradle-to-grave" regulation that requires businesses, institutions, and other entities that generate hazardous waste to track such waste from the point of generation until it is recycled, reused, or properly disposed of. The USEPA has primary responsibility for implementing the RCRA.

USEPA's Risk Management Plan

Section 112(r) of the federal CAA (referred to as the USEPA's Risk Management Plan) specifically covers "extremely hazardous materials" which include acutely toxic, extremely flammable, and highly explosive substances. Facilities involved in the use or storage of extremely hazardous materials must implement a Risk Management Plan (RMP), which requires a detailed analysis of potential accident factors and implementation of applicable mitigation measures.

Federal Occupational Safety and Health Administration (OSHA)

The Occupational Safety and Health Act (OSHA) prepares and enforces occupational health and safety regulations with the goal of providing employees a safe working environment. OSHA regulations apply to the work place and cover activities ranging from confined space entry to toxic chemical exposure.

U.S. Department of Transportation

The United States Department of Transportation regulates the interstate transport of hazardous materials and wastes through implementation of the Hazardous Materials Transportation Act. This act specifies driver-training requirements, load labeling procedures, and container design and safety specifications. Transporters of hazardous wastes must also meet the requirements of additional statutes such as the RCRA.

STATE

California Code of Regulations (CCR), Title 22, Definition of Hazardous Material

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22, §66260.10, of the CCR as: "A substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed."

Department of Toxic Substances Control

The California Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under the RCRA and the State Hazardous Waste Control Law. Both laws impose "cradle-to-grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment.

California Occupational Safety and Health Administration (Cal/OSHA)

The California Occupational Safety and Health Administration (Cal/OSHA) has primary responsibility for developing and enforcing state workplace safety regulations, including requirements for safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation.

Regional Water Quality Control Board

The SWRCB and RWQCBs regulate hazardous substances, materials, and wastes that may affect surface water or groundwater through a variety of state statutes, including the Porter-Cologne Water Quality Control Act and underground storage tank cleanup laws. Any person proposing to discharge waste within the State must file a Report of Waste Discharge with the appropriate regional board. The proposed project is located within the jurisdiction of the CVRWQCB.

Hazardous Materials Emergency Response/Contingency Plan

Chapter 6.95, §25503, of the California Health and Safety Code requires businesses that handle/store a hazardous material or a mixture containing a hazardous material to establish and implement a Business Plan for Emergency Response (Business Plan). A Business Plan is required when the amount of hazardous materials exceeds 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases. A Business Plan is also required if federal thresholds for extremely hazardous substances are exceeded. The Business Plan includes procedures to deal with emergencies following a fire, explosion, or release of hazardous materials that could threaten human health and/or the environment.

California Accidental Release Prevention Program

The goal of the California Accidental Release Prevention Program (CalARP) is to prevent accidental releases of substances that pose the greatest risk of immediate harm to the public and the environment. Facilities are required to prepare a Risk Management Plan in compliance with CCR Title 19, Division 2, Chapter 4.5, if they handle, manufacture, use, or store a federally regulated substance in amounts above established federal thresholds; or if they handle a state regulated substance in amounts greater than state thresholds and have been determined to have a high potential for accident risk.

LOCAL

Shasta County

The Shasta County General Plan includes the following Objectives and Policy that apply to the proposed project:

Chapter 5.6, I	Chapter 5.6, Hazardous Materials; Chapter 5.4, Fire Safety and Sheriff Protection				
Objectives:	HM-1	Protection of life and property from contact with hazardous materials through site design and land use regulations and storage and transportation standards.			
	HM-2	Protection of life and property in the event of the accidental release of hazardous materials through emergency preparedness planning.			
	FS-1	Protect development from wildland and non-wildland fires by requiring new development projects to incorporate effective site and building design measures commensurate with level of potential risk presented by such a hazard and by discouraging and/or preventing development from locating in high risk fire hazard areas.			

Shasta County Hazardous Materials Area Plan, 2018

The Shasta County Hazardous Materials Area Plan establishes policies, responsibilities, and procedures required to protect the health and safety of Shasta County's citizens, the environment, and public and private property from the effects of hazardous materials emergency incidents. The Area Plan establishes the emergency response organization for hazardous materials incidents occurring within Shasta County including the cities of Redding, Anderson, and Shasta Lake. This Plan documents the operational and general response procedures for the Shasta-Cascade Hazardous Materials Response Team (SCHMRT), which is the primary hazardous materials response group for Shasta County.

DISCUSSION OF IMPACTS

Questions A and B

The proposed project is intended for recreational use and would not involve the routine transport, use, or disposal of hazardous materials in the long-term. Construction activities could potentially use a

limited amount of hazardous, flammable substances/oils during heavy equipment operation for site preparation and building construction. However, any transport, use, and storage of hazardous materials during construction of the project would be conducted in accordance with all applicable State and federal laws, including, but not limited to, those identified under Regulatory Context above. Therefore, the project would not create a significant hazard to the public or the environment through a foreseeable accident, or the routine transport, use, or disposal of hazardous materials. Potential impacts would be **less than significant**.

Question C

According to the Shasta County Office of Education, the nearest school to the project site is Fall River Elementary School on Curve Street, approximately 0.3 miles northwest of the developed park site. Therefore, the project would not emit or involve the handling of hazardous materials, substances, or waste within 0.25 miles of a school; there would be **no impact.**

Question D

In conjunction with the Cassel-Fall River Road Bridge Replacement project, an Initial Site Assessment (ISA) was completed by ENPLAN in 2018. The ISA covered the developed park site. To ascertain reported areas of possible environmental impairment, 118 federal, state, local, tribal, and proprietary records databases were reviewed. The search distance for the records search was up to one mile of the bridge study site.

According to the ISA, Assessor's Parcel Number 032-270-001 (24754 South Main Street), which is within the developed park site in the area where the picnic area/pavilion is proposed, was identified on the HAZNET database under the name of William Stoltenberg. This parcel is the location of the former Fall River Feed Store. The property was subject to a Soil Removal Work Plan due to historical use of the property as a feed mill. Between June 30 and August 12, 2014, approximately 175 cubic yards of soil was excavated from the property and disposed of at an off-site facility. The excavations were backfilled with clean fill materials, compacted, and covered with gravel or hydroseeded for erosion and sediment control. This work satisfied the requirements of the Soil Removal Work Plan, and no further action was required.

During a site reconnaissance in 2017, a building (old barn) in the developed park site was being used as an (unauthorized) automobile repair shop. Oil and grease stains were observed inside the building and on the ground surface along the southern end of the building. The land owner, PG&E, was notified; PG&E required termination of the unauthorized use. The barn has since been demolished and removed from the property, and the area leveled. In 2020, during construction of the current park facilities, an underground storage tank was encountered. PG&E removed the tank and conducted soil testing, but the results are not on file with Shasta County Environmental Health Department. No ground-disturbing activities are proposed in the vicinity of the old barn or the underground storage tank.

Neither the developed nor undeveloped park properties are currently included on a Cortese site list compiled pursuant to Government Code Section 65962.5. According to the SWRCB's Geotracker database, the nearest active cleanup site is Roys Chevron Case 2 (T0608900197) on Highway 299E, approximately 750 feet northwest of the developed park site. The case was opened in 1996 due to an unauthorized release of gasoline from underground storage tanks on the property. Due to the distance from the project site, there would be no impact associated with the Roys Chevron site. The CalGEM Finder indicated that there are no oil or gas wells on the park site, adjacent to the site, or within a mile of the project area. The CalRecycle Solid Waste Information System Facility/Site Search indicates that there are no municipal landfills located on or near the project area. A review of the National Pipeline Mapping System indicates that no natural gas transmission lines within the project area or within 1 mile of the project area. The nearest natural gas pipeline is in McArthur approximately 4 miles from the project.

The information presented above indicates that there are no known active hazardous materials sites

within the project area or adjacent to the project area that would create a significant hazard to the public or other environment. However, given the past land uses on the property, including removal of an underground tank and contaminated soil, there is a moderate potential for additional contaminants to be present. **MM 4.9.1** is included to address any residual petroleum and/or other soil contamination that could be discovered during earth-disturbing activities. Impacts would be **less than significant** with implementation of **MM 4.9.1**.

Question E

The project area is not located in an airport land use plan area. The Fall River Mills airport is 0.67 miles northeast of the project area. Although construction workers would be completing improvements less than two miles from the Airport, airport operations must comply with FAA Regulations, including the FAA Airport Safety Program, which addresses general aviation airport safety, runway safety, and safety management systems (SMS). These regulations were established, in part, to protect the health and safety of individuals living and working in proximity to an airport. In addition, no substantial noise exposure would occur to construction workers from aircraft noise. Therefore, there would be **no impact.**

Question F

A temporary increase in traffic could occur during construction and could interfere with emergency response times, but construction related traffic would be minor due to the overall scale of the construction activities. Further, construction related traffic would be spread over the duration of the construction schedule and would be minimal on a daily basis. In addition, pursuant to Cal/OSHA requirements, temporary traffic control during completion of activities that require work in the public right-of-way is required and must adhere to the procedures, methods, and guidance given in the current edition of the California Manual on Uniform Traffic Control Devices.

When operational, the project would not significantly increase the daily number of cars entering and exiting the park or the neighborhood to such an extent that traffic congestion that could impede emergency response or evacuation would occur. Therefore, the project would have a **less-than-significant impact** on adopted emergency response and emergency evacuation plans.

Question G

The proposed project does not include any development or improvements that would increase the long-term risk of wildland fires or expose people or structures to wildland fires. During construction, the District's contractor is required to comply with applicable State fire codes and Cal/OSHA regulations adopted to minimize potential fire risks associated with construction activities. Compliance with existing State regulations ensures that impacts are **less than significant**.

CUMULATIVE IMPACTS

The potential for hazard-related impacts during construction are site specific and have the potential to affect only a limited area on a temporary basis during completion of the improvements. The transport of hazardous chemicals would be regulated in a similar fashion to other cumulative projects that require the transport of hazardous chemicals for site-specific activities. Completion of the proposed improvements requires implementation of measures to reduce the potential for adverse impacts associated with hazards and hazardous materials. In terms of operational impacts, the proposed project does not include the routine transport, use, or disposal of hazardous materials, would not emit hazardous emissions, and would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires (refer to Section 4.20, Wildfire). Therefore, the proposed project's potential for cumulative impacts would be less than significant.

MITIGATION

MM 4.9.1 If, in the course of excavation or other construction activities, any signs of residual petroleum and other soil contamination (e.g., stained, discolored, or odorous soil) are uncovered, discovered, or otherwise detected or observed, construction activities in the affected area shall cease, and the Fall River Valley Community Services District General Manager shall be immediately contacted.

The District Manager, in consultation with the Shasta County Environmental Health Department (SCEHD) and Central Valley Regional Water Quality Control Board (CVRWQCB), shall advise the contractor of the appropriate measures for containment, testing, and removal of the suspect material, in accordance with federal, State and local laws and regulations. Construction work in the affected area shall not resume until the District Manager, in consultation with the SCEHD and/or CVRWQCB, has determined that all required corrective measures have been satisfied.

DOCUMENTATION

- **California Environmental Protection Agency.** 2021. Cortese List Data Resources. https://calepa.ca.gov/sitecleanup/corteselist/. Accessed August 2021.
- **California Department of Forestry and Fire Protection.** 2021. Fire Hazard Severity Zone Viewer. https://egis.fire.ca.gov/FHSZ/. Accessed August 2021
- **Federal Aviation Administration.** 2019. Airport Facilities Data. https://www.faa.gov/airports/. Accessed August 2021.
- Department of Toxic Substances Control. EnviroStor.

 https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=45350001. Accessed August 2021
- CalRecycle. Solid Waste Information System (SWIS).
 https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. Accessed August 2021.
 Accessed August 2021.
- **National Pipeline Mapping System.** 2021. National Pipeline Mapping System Public Viewer. https://pvnpms.phmsa.dot.gov/PublicViewer/. Accessed September 2021.
- Shasta County. January 2018. Hazardous Materials Area Plan. https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/ehd-docs/areaplan. Accessed March 2020.
- **Shasta County.** 2004. Shasta County General Plan, Chapter 5.6 (Hazardous Materials). https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/docs/56hazmat.pdf?sfvrsn=d6132daa 0. Accessed September 2021.

4.10 HYDROLOGY AND WATER QUALITY

Would the project:

	ssues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?				
b.	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				\boxtimes
C.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner that would:				
	(i) result in substantial erosion or siltation on- or off-site;			\boxtimes	
	(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				
	(ii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			\boxtimes	
	(iv) impede or redirect flood flows?			\boxtimes	
d.	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

REGULATORY CONTEXT

FEDERAL

Clean Water Act (CWA)

The CWA (33 USC §1251-1376), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality and was established to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Pertinent sections of the Act are as follows:

- 1. Sections 303 and 304 provide for water quality standards, criteria, and guidelines.
- 2. Section 401 (Water Quality Certification) requires an applicant for any federal permit that would authorize a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the Act.
- Section 402 establishes the NPDES, a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the SWRCB and is discussed in detail below.

4. Section 404, jointly administered by the USACE and USEPA, establishes a permit program for the discharge of dredged or fill material into waters of the United States.

Federal Anti-Degradation Policy

The federal Anti-Degradation Policy is part of the CWA (Section 303(d)) and is designed to protect water quality and water resources. The policy directs states to adopt a statewide policy that protects designated uses of water bodies (e.g., fish and wildlife, recreation, water supply, etc.). The water quality necessary to support the designated use(s) must be maintained and protected.

Safe Drinking Water Act

Under the 1974 Safe Drinking Water Act, most recently amended in 1996, USEPA regulates contaminants of concern to domestic water supply, which are those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are classified as either primary or secondary Maximum Contaminant Levels (MCLs). MCLs and the process for setting these standards are reviewed triennially.

Federal Emergency Management Agency (FEMA)

FEMA is responsible for mapping flood-prone areas under the National Flood Insurance Program (NFIP). Communities that participate in the NFIP are required to adopt and enforce a floodplain management ordinance to reduce future flood risks related to new construction in a flood hazard area. In return, property owners have access to affordable federally-funded flood insurance policies.

National Pollution Discharge Elimination System (NPDES)

Under Section 402(p) of the CWA, the USEPA established the NPDES to enforce discharge standards for both point-source and non-point-source pollution. Dischargers can apply for individual discharge permits, or apply for coverage under the General Permits that cover certain qualified dischargers. Point-source discharges include municipal and industrial wastewater, stormwater runoff, combined sewer overflows, sanitary sewer overflows, and municipal separate storm sewer systems. NPDES permits impose limits on discharges based on minimum performance standards or the quality of the receiving water, whichever type is more stringent in a given situation.

STATE

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code §13000 *et seq.*) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of waters of the State. The Porter-Cologne Act applies to surface waters, wetlands, and groundwater, and to both point and non-point sources of pollution. The Act requires a Report of Waste Discharge for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. The RWQCBs enforce waste discharge requirements identified in the Report.

State Anti-Degradation Policy

In 1968, as required under the Federal Anti-Degradation Policy, the SWRCB adopted an Anti-Degradation Policy, formally known as the *Statement of Policy with Respect to Maintaining High Quality Waters in California* (State Water Board Resolution No. 68-16). Under the Anti-Degradation Policy, any actions that can adversely affect water quality in surface or ground waters must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial use of the water, and not result in water quality less than that prescribed in water quality plans and policies.

National Pollution Discharge Elimination System

Pursuant to the federal CWA, the responsibility for issuing NPDES permits and enforcing the NPDES program was delegated to the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCB). NPDES permits are also referred to as waste discharge requirements (WDRs) that regulate discharges to waters of the United States. Below is a description of relevant NPDES general permits.

Construction Activity and Post-Construction Requirements

Discharges from construction sites that disturb one acre or more of total land area are subject to the NPDES permit for *Discharges of Storm Water Runoff associated with Construction Activity* (currently Order No. 2009-009-DWQ), also known as the Construction General Permit. The permitting process requires the development and implementation of an effective Storm Water Pollution Prevention Plan (SWPPP). Coverage under the Construction General Permit is obtained by submitting a Notice of Intent (NOI) to the SWRCB and preparing the SWPPP prior to the beginning of construction. The SWPPP must include BMPs to reduce pollutants and any more stringent controls necessary to meet water quality standards. Dischargers must also comply with water quality objectives as defined in the applicable Basin Plan. If Basin Plan objectives are exceeded, corrective measures are required.

The Construction General Permit includes post-construction requirements for areas in the State not covered by a Standard Urban Storm Water Management Plan (SUSWMP) or a Phase I or Phase II MS4 Permit. These requirements are intended to ensure that the post-construction conditions at the project site do not cause or contribute to direct or indirect water quality impacts (i.e., pollution and/or hydromodification) upstream or downstream.

Where applicable, the SWPPP submitted to the SWRCB with the NOI must include a description of all post-construction stormwater management measures. The SWRCB SMARTS post-construction calculator or similar method would be used to quantify the runoff reduction resulting from implementation of the measures. The applicant must also submit a plan for long-term maintenance with the NOI. The maintenance plan must be designed for a minimum of five years and must describe the procedures to ensure that the post-construction stormwater management measures are adequately maintained.

Water Quality Control Plans (Basin Plans)

Each of the State's RWQCBs is responsible for developing and adopting a basin plan for all areas within its region. The Plans identify beneficial uses to be protected for both surface water and groundwater. Water quality objectives for all waters addressed through the plans are included, along with implementation programs and policies to achieve those objectives. Waste discharge requirements (WDRs) were adopted in order to attain the beneficial uses listed for the Basin Plan areas.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA), enacted in September 2014, established a framework for groundwater resources to be managed by local agencies in areas designated by the Department of Water Resources as "medium" or "high" priority basins. Basins were prioritized based, in part, on groundwater elevation monitoring conducted under the California Statewide Groundwater Elevation Monitoring (CASGEM) program.

The SGMA requires local agencies in medium- and high-priority basins to form Groundwater Sustainability Agencies (GSAs) and be managed in accordance with locally-developed Groundwater Sustainability Plans (GSPs). Medium- and high-priority basins must be managed under a GSP by January 31, 2022. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans.

LOCAL

Shasta County

The Shasta County General Plan includes the following Objective and Policies that apply to the proposed project:

Chapter 5.2,	Chapter 5.2, Flood Protection; Chapter 6.6, Water Resources and Water Quality				
Objective:	FL-1	Protection of public health and safety, both on-site and downstream, from flooding through floodplain management which regulates the types of land uses which may locate in the floodplain, prescribes construction designs for floodplain development, and requires mitigation measures for development which would impact the floodplain by increasing runoff quantities.			
Policies:	FL-c	Whenever possible, flood control measures should consist of channel diversions or limited floodplain designs which avoid alteration of creeks and their immediate environs.			
	FL-h	The impacts of new development on the floodplain or other downstream areas due to increased runoff from that development shall be mitigated. In the case of the urban or suburban areas, and in the urban and town centers, the County may require urban or suburban development to pay fees which would be used to make improvements on downstream drainage facilities in order to mitigate the impacts of upstream development.			
	W-a	Sedimentation and erosion from proposed developments shall be minimized through grading and hillside development ordinances and other similar safeguards as adopted and implemented by the County.			

DISCUSSION OF IMPACTS

Questions A and E

The proposed project has the potential to temporarily degrade water quality due to increased erosion during project construction; however, as identified in Section 1.6 (Required Permits and Approvals), the project is subject to issuance of a grading permit from Shasta County. Section 12.12.070 of the Shasta County Code requires implementation of BMPs to control erosion and sedimentation and prevent damage to off-site property, streams, watercourses, and aquatic habitats. BMPs may include, but are not limited to, use of straw wattles, silt fences, and/or gravel berms to prevent sediment from discharging off-site; and revegetating temporarily disturbed areas upon completion of construction.

The plan would identify any permanent erosion control measures necessary to minimize the potential for long-term impacts, and would provide for ongoing maintenance of any required erosion control measures as necessary. With implementation of BMPs in accordance with County requirements, potential impacts during construction and operation would be less than significant.

As discussed under Regulatory Context above, the SGMA established a framework for groundwater resources to be managed by local agencies in areas designated by the Department of Water Resources as medium or high priority basins. The project area is not located a medium or high priority basin, and there is not a sustainable groundwater management plan that applies to the proposed project.

Compliance with County requirements for erosion and sediment control ensures that the project would not violate any water quality standards or waste discharge requirements or conflict with or obstruct implementation of a water quality control plan. Impacts would be **less than significant.**

Question B

The proposed project would not require groundwater supplies for construction or operation. The proposed project includes the addition of approximately 0.23 acres of impervious surfaces (e.g., restroom, pavilion, paved trail in the developed park site, and access road to the undeveloped park site). The addition of impervious surfaces would decrease the area available for water penetration, thereby reducing local groundwater recharge potential. However, the increase in impervious surfaces represents a very small percentage of the entire surface area of the hydrologic region, and open space areas in and adjacent to the park would continue to provide for groundwater recharge. Therefore, impacts on groundwater supplies and recharge are less than significant.

Question C

Storm drainage in and adjacent to the project area consists mainly of surface drainage features with some subsurface features. Surface storm drainage features consist of natural waterways, man-made diches, and/or remnants of natural watercourses. Subsurface drainage consists of existing culverts installed as part of previous trail work.

The proposed project would result in an increase of approximately 0.23 acres of impervious surface attributed to the restroom, pavilion, paved trail in the developed park, and access road to the undeveloped park. The new impervious surfaces are spread throughout the developed and undeveloped park areas and are not expected to substantially change drainage patterns in the area.

In accordance with Title 16 (Buildings and Construction), Section 16.04.140 (Surface Drainage Report), of the Shasta County Code, the County's Building Official will review construction plans for the project and determine whether surface drainage from the project could result in significant impacts. The Building Official may require as a prerequisite to the issuance of a building permit that the applicant submit a drainage report prepared by a registered civil engineer that analyzes surface drainage in conjunction with the proposed project. The construction plans would identify any required drainage improvements to ensure that the project would not increase the potential for flooding on- or off site, or exceed the capacity of the existing storm drain system. Compliance with existing County regulations ensures that impacts would be **less than significant**.

Question D

A tsunami is a wave generated in a large body of water (typically the ocean) by fault displacement or major ground movement. The project area is located approximately 140 miles east of the Pacific Ocean and is not at risk for inundation by tsunami. A seiche is a large wave generated in an enclosed body of water in response to ground shaking. The largest enclosed body of water to the project site is Fall River Lake, approximately 0.6 miles northwest of the project site. Seiches could potentially be generated in Fall River Lake due to very strong ground-shaking; however, it is not likely that such ground shaking would cause a seiche large enough to overtop the Lake.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (Panels 06089C0500G and 06089C0800G), effective March 17, 2011, a portion of the pavilion and some of the benches and picnic tables may be located in the 100-year floodplain of the Pit and Fall Rivers. If a flooding event occurred, there is a risk of damage or destruction of the pavilion, benches, and picnic tables; however, no pollutants would be stored in or adjacent to these facilities.

Therefore, there would be no risk of pollutant release from the project due to inundation by a tsunami, seiche, or flood. There would be **no impact.**

CUMULATIVE IMPACTS

The proposed project and other potential cumulative projects in the region, including growth resulting from build-out of the County's General Plan, could result in degradation of water quality, adverse impacts to groundwater supplies, groundwater recharge, and an increased risk of flooding due to additional surface runoff generated by the projects. All projects in the State that result in land disturbance of one acre or more are required to comply with the State Water Board General Construction NPDES permit which requires implementation of post-construction measures to ensure that new development does not cause or contribute to impacts from stormwater runoff upstream or downstream. Projects in the County are also required to comply with applicable County codes adopted to minimize potential impacts on hydrology and water quality. Compliance with State and local regulations would ensure that the project's cumulative contribution to hydrology and water quality impacts is **less than significant**.

MITIGATION

None necessary.

DOCUMENTATION

- California Department of Water Resources. 2021. Sustainable Groundwater Management Act, Basin Prioritization Dashboard. https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed September 2021.
- _____. 2020. Groundwater Information System (GAMA).

 https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/default.asp?CMD=runreport

 &myaddress=40.6804279%2C+-122.37084190000002&zl=15. Accessed September 2021.
- Central Valley Regional Water Quality Control Board. 2018. Water Quality Control Plan for the Sacramento and San Joaquin River Basins. https://www.waterboards.ca.gov/centralvalley/water-issues/basin-plans/sacsjr-201805.pdf. Accessed August 2021.
- Federal Emergency Management Agency. National Flood Hazard Map (Panels 06089C0500G and 06089C0800G), effective March 17, 2011. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed September 2021.
- **Shasta County**. 2004. Shasta County General Plan, Chapter 6.7 (Fish and Wildlife Habitat). http://www.co.shasta.ca.us/docs/Resource_Management/docs/67fish.pdf?sfvrsn=0. Accessed August 2021.
- _____. 2011. Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan.

 http://www.co.shasta.ca.us/docs/Resource_Management/generalplanupdate/HazardMitigationPlan.pdf?sfvrsn=0. Accessed August 2021.
- State of California, Department of Water Resources. 2019. Sustainable Groundwater Management Act, 2018 Basin Prioritization. https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed August 2021.

4.11 LAND USE AND PLANNING

Would the project:

ls	ssues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Physically divide an established community?				\boxtimes
b.	Cause a significant environmental impact due to a conflict with any applicable land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				\boxtimes

REGULATORY CONTEXT

FEDERAL

There are no federal regulations pertaining to land use and planning that apply to the proposed project.

STATE

California Government Code

California Government Code (CGC) §65300 *et seq.* contains many of the State laws pertaining to the regulation of land uses by cities and counties. These regulations include requirements for general plans, specific plans, subdivisions, and zoning. State law requires that all cities and counties adopt General Plans that include seven mandatory elements: land use, circulation, conservation, housing, noise, open space, and safety. A General Plan is defined as a comprehensive long-term plan for the physical development of the county or city, and any land outside its boundaries that is determined to bear relation to its planning. A development project must be found to be consistent with the General Plan prior to project approval.

LOCAL

Shasta County

The Shasta County General Plan is the principal land use document guiding development within the District, which it does by establishing goals and policies that guide growth, land use patterns, and other aspects of the community. The goals and policies are designed for the purpose of avoiding or minimizing impacts to the natural environment. The General Plan recognizes that major factors of the natural environment are landforms, water, climate, minerals, soils, vegetation, and wildlife. The General Plan contains Community Organization and Development Pattern" and Open Space and Recreation" Elements that fulfill the Land Use and Open Space requirements, respectively.

The Shasta County Code implements the County's General Plan. The purpose of the land use and planning provisions of the Code (Title 17, Zoning) is to provide for the orderly and efficient application of regulations and to implement and supplement related laws of the state of California, including but not limited to CEQA.

DISCUSSION OF IMPACTS

Question A

A significant impact could occur if the proposed project were large enough or otherwise configured in such a way as to create a physical barrier within an established community. The project site is partly already developed with a permeable trail and the undeveloped parcel is designated as open space. The project site is bordered by residential and commercial areas to the north and northwest, the golf course and country club to the west, and the Fall and Pit Rivers to the south and southeast. Implementation of the project would not disturb or alter access to any existing adjacent uses. Therefore, the proposed project would not physically divide an established community but enhance recreational access to the Fall and Pit Rivers. There would be **no impact.**

Question B

As discussed in each resource section of this Initial Study, the proposed project is consistent with applicable Policies and Objectives of the Shasta County General Plan and regulations of the agencies identified in Section 1.7 of this Initial Study. Where necessary, mitigation measures are included to reduce impacts to less-than-significant levels. Therefore, with implementation of the mitigation measures identified in Section 1.10, the proposed project would not conflict with any plans, policies, or regulations that were adopted for the purpose of avoiding or mitigating an environmental effect. No additional mitigation measures are necessary.

CUMULATIVE IMPACTS

As documented herein, the proposed project would not result in impacts to land use plans; therefore, the project would not contribute to adverse impacts associated with cumulative impacts to the land use section.

MITIGATION

None necessary

DOCUMENTATION

Shasta County. 2004. Shasta County General Plan, Chapter 6.9 (Open Space and Recreation). http://www.co.shasta.ca.us/docs/Resource_Management/docs/69open.pdf?sfvrsn=0. Accessed August 2021

_____. 2004. Shasta County General Plan, Chapter 7.1 (Community Organization and Development Pattern). http://www.co.shasta.ca.us/docs/Resource_Management/docs/7-1-communityorganizationamended-08-26-2014-gpa10-002.pdf?sfvrsn=2. Accessed November 2021.

. 2016. Shasta County Code of Ordinances. Title 17, Zoning.
https://www.municode.com/library/ca/shasta_county/codes/code_of_ordinances?nodeId=CD_OR_DTIT17ZO. Accessed August 2021

4.12 MINERAL RESOURCES

Would the project:

ls	ssues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				\boxtimes

REGULATORY CONTEXT

There are no federal or local regulations pertaining to mineral resources that apply to the proposed project.

STATE

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act (SMARA), Chapter 9, Division 2 of the Public Resources Code (PRC), provides a comprehensive surface mining and reclamation policy to ensure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. Mineral Resource Zones (MRZs) are applied to sites determined by the California Geological Survey (CGS) as being a resource of regional significance, and are intended to help maintain mining operations and protect them from encroachment of incompatible uses. The Zones indicate the potential for an area to contain significant mineral resources.

DISCUSSION OF IMPACTS

Questions A and B

Shasta County has diverse mineral resources throughout the County. The main mineral resource is alluvial aggregate which can be surface mined throughout the County. There are fourteen distinct metallic resources. These resources are found in the western portion of the County. The CGS does not identify any active mines within five-miles of the project area. According to the CGS, there are no designated Mineral Resource Zones near the project area. There are no active mines or mineral resources study areas near the project area. Therefore, there would be **no impact**.

CUMULATIVE IMPACTS

As documented herein, the proposed project would not result in impacts to mineral resources; therefore, the project would not contribute to adverse impacts associated with cumulative impacts to mineral resources.

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None nec	essary.
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DOCUMENTATION

Department of Conservation, California Geological Survey. 2007. SMARA Mineral Land Classification Maps. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_97-03/OFR_97-03-Plate9B.pdf. Accessed March 2017.

Shasta County. 2004. Shasta County General Plan, Chapter 6.3 (Minerals). http://www.co.shasta.ca.us/docs/Resource_Management/docs/63minerals.pdf?sfvrsn=0. Accessed August 2021.

____. 2016. Shasta County Code of Ordinances, Title 17 (Zoning), Chapter 18.04 (Surface Mining and Reclamation).

https://www.municode.com/library/ca/shasta_county/codes/code_of_ordinances?nodeId=CD_OR_D_TIT17ZO. Accessed August 2021.

4.13 Noise

Would the project result in:

Is	ssues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies?		\boxtimes		
b.	Generation of excessive ground borne vibration or ground borne noise levels?			\boxtimes	
C.	For a project located within the vicinity of a private airstrip or an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

NOISE FUNDAMENTALS

Commonly used technical acoustical terms are defined as follows:

Acoustics	The science of sound.
Ambient Noise	The distinctive pre-project acoustical characteristics of a given area consisting of all noise sources audible at that location.
Attenuation	The reduction of noise.
A-Weighting	The sound level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.
Decibel, or dB	The fundamental unit of measurement that indicates the intensity of a sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.
CNEL	Community Noise Equivalent Level. The average sound level over a 24-hour period, with a penalty of 5 dB added during evening hours (between 7:00 PM and 10:00 PM) and a penalty of 10 dB added during nighttime hours (between 10:00 PM and 7:00 AM).
Ldn	Day-Night Average Sound Level. The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m. (Note: CNEL and Ldn represent daily levels of noise exposure averaged on an annual or daily basis).
Leq	The sound level in decibels, equivalent to the total sound energy measured over a stated period of time. L_{eq} includes both steady background sounds and transient short-term sounds.

REGULATORY CONTEXT

FEDERAL

There are no federal regulations pertaining to noise that apply to the proposed project.

STATE

California Government Code §65302(f)

California Government Code §65302(f) requires a Noise Element to be included in all city and county General Plans. The Noise Element must identify and appraise major noise sources in the community (e.g., highways and freeways, airports, railroad operations, local industrial plants, etc.). A noise contour diagram depicting major noise sources must be prepared and used as a guide for establishing land use patterns to minimize the exposure of residents to excessive noise. The Noise Element must include implementation measures and possible solutions that address existing and foreseeable noise levels.

California Building Code

The CBC (CCR Title 24, Part 2) includes noise insulation standards that apply to all new construction. The CBC requires that interior noise levels attributable to exterior sources not exceed 45 dB in any habitable room. The noise metric (i.e., day-night average sound level [Ldn] or the community noise equivalent level [CNEL]) must be consistent with the Noise Element of the jurisdiction's General Plan. Additional requirements are included for multi-family residential buildings. Compliance with the noise insulation standards is verified through the building permit process.

LOCAL

Shasta County

The Shasta County General Plan Chapter 5.5 (Noise) established criteria for determining the potential noise conflicts between various land uses and noise sources. The following criteria presented in Figure N-IV of Chapter 5.5 of the Shasta County General Plan pertains to the proposed project:

TABLE N-IV NOISE LEVEL PERFORMANCE STANDARDS FOR NEW PROJECTS AFFECTED BY OR INCLUDING NON-TRANSPORTATION SOURCES				
Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)		
Hourly L _{eq} , dB	55	50		

In addition to Figure N-IV, Chapter 5.5 also outlines maximum allowable noise exposure for various land use types, including parks:

TABLE N-VI MAXIMUM ALLOWABLE NOISE EXPOSURE TRANSPORTATION NOISE SOURCES

		Interior Sp	aces
Land Use	Outdoor Activity Areas ¹ L _{dn} /CNEL, dB	L _{dn} /CNEL,dB	L_{eq} , dB^2
Residential	60³	45	
Transient Lodging	60 ⁴	45	
Hospitals, Nursing Homes	60³	45	
Theaters, Auditoriums, Music Halls			35
Churches, Meeting Halls	60³		40
Office Buildings			45
Schools, Libraries, Museums			45
Playgrounds, Neighborhood Parks	70		

The Shasta County General Plan contains the following Objectives and Policies that pertain to this project:

Chapter 5.5,	Chapter 5.5, Noise					
Objectives:	N-1	To protect County residents from the harmful and annoying effects of exposure to excessive noise.				
	N-2	To protect the economic base of the County by preventing incompatible land uses from encroaching upon existing or programmed land uses likely to create significant noise impacts.				
Policies:	N-a	New noise-sensitive uses shall not be allowed in areas where the noise level created by existing non-transportation noise sources will exceed the noise level standards of Table N-IV as measured immediately within the property line or within a designated outdoor activity area (at the discretion of the Planning Director) of the proposed project, unless effective noise mitigation measures will be incorporated into the project design to achieve compliance with the standards specified in Table N-IV.				
	N-b	Noise likely to be created by a proposed non-transportation land use shall be mitigated so as not to exceed the noise level standards of Table N-IV as measured immediately within the property line of adjacent lands designated as noise-sensitive. Noise generated from existing or proposed agricultural operations conducted in accordance with generally accepted agricultural industry standards and practices is not required to be mitigated.				
	N-i	Where noise mitigation measures are required to achieve the standards of Tables N-IV and N-VI, the emphasis of such measures shall be placed upon site planning project design. The use of noise barriers shall be considered a means of achieving compliance with the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.				

Initial Study: Fall River Valley CSD, Two Rivers Park Project

N-I

The use of site planning and building materials/design as primary methods of noise attenuation is encouraged. Recommended techniques include, but are not limited to, such items as:

Site Planning

- Use of building setbacks and dedication of noise easements to increase the distance between the noise source and the receiver.
- Locating uses and orienting buildings that are compatible with higher noise levels adjacent to noise-generators or in clusters as a means to shield more noise-sensitive areas and uses
- Using noise-tolerant structures, such as garages or carports, to shield noise-sensitive areas.
- Clustering office, commercial, or multiple-family residential structures to reduce interior open-space noise levels.
- Locate automobile and truck access to commercial or industrial land uses abutting residential parcels at the maximum practical distance from the residential parcels.
- Avoid the siting of commercial and industrial loading and shipping facilities adjacent to residential parcels whenever practicable.
- Parking areas for commercial and industrial uses should setback from adjacent residential uses to the maximum extent feasible, or buffered and shielded by walls, fences, berms, and/or landscaping techniques.

DISCUSSION OF IMPACTS

Question A

Noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect sensitive receptors. The Shasta County General Plan identifies residential areas, parks, schools, churches, hospitals, and long-term care facilities as noise sensitive areas and uses.

The Shasta County General Plan Chapter 5.5 (Noise) establishes maximum recommended noise exposure levels on the basis of land use types. The recommended noise exposure levels use day/night average sound level (DNL) (or Ldn), and are applicable to exterior (outside) noise, as opposed to noise levels occurring in interior building spaces. The proposed project area is surrounded by single-family residential, commercial, and natural, open space uses. The nearest sensitive receptors to the developed park site are single-family residences ±150 feet north of the developed park on Main Street and Bridge Street. The nearest sensitive receptors in the undeveloped park are residences ±250 feet northwest of proposed roadway improvements on Grand Rapids Avenue and ±200-300 feet north of proposed trail improvements in the undeveloped park.

Construction Noise

Temporary noise impacts would occur due to an increase in traffic from construction workers commuting to the site; however, it is not anticipated that worker commutes would significantly increase daily traffic volumes. Noise would be generated during delivery of construction equipment and materials to the project site; however, heavy equipment would remain on-site for the duration of construction.

Construction activities in the developed park would include grading, bathroom and pavilion construction, paving a segment of existing trail, and placing benches and signs throughout the park. Construction activities in the undeveloped park include minor clearing and grading, installation of an unpaved trail, construction of an unpaved parking lot, and installation of a gate and signage.

Potential noise impacts on sensitive receptors from construction activities associated with the project would be a function of the noise emission levels generated by operating construction equipment, equipment location, the timing and duration of the construction activities, the distance between construction noise sources and noise-sensitive receptors, and the existing ambient noise levels. **Figure 4.13-1** shows noise levels of common activities to enable the reader to compare construction-noise with common activities.

Noise levels from construction-related activities would fluctuate, depending on the number and type of construction equipment operating at any given time. As shown in **Table 4.13-1**, construction equipment anticipated to be used for project construction typically generates maximum noise levels ranging from 74 to 89 decibels (dBA) at a distance of 50 feet. Construction noise levels would vary from hour to hour and day to day, depending on the equipment in use, the operations being performed, and the distance between the source and receptor.

TABLE 4.13-1
Examples of Construction Equipment
Noise Emission Levels

Equipment	Typical Noise Level (dBA) 50 feet from Source
Roller	74
Concrete Vibrator	76
Pump	76
Saw	76
Backhoe	80
Air Compressor	81
Generator	81
Compactor	82
Concrete Pump	82
Compactor (ground)	83
Concrete Mixer	85
Dozer	85
Excavator	85
Grader	85
Loader	85
Jack Hammer	88
Truck	88
Paver	89
Scraper Sources: U.S. Department of Trans	89

Sources: U.S. Department of Transportation, Federal Transit Administration, 2018. Federal Highway Administration, 2017.

Figure 4.13-1
Noise Levels of Common Activities

Common Outdoor No Activities	oise Lev (dBA)	vel Common Indoor Activities
Jet Fly-over at 1000 ft	110	Rock Band
Gas Lawn Mower at 3 ft	90	Food Blender at 3 ft
Diesel Truck at 50 ft at 50 mph Noisy Urban Area, Daytime Gas Lawn Mower at 100 ft Commercial Area Heavy Traffic at 300 ft	70	Garbage Disposal at 3 ft Vacuum Cleaner at 10 ft Normal Speech at 3 ft
Quiet Urban, Daytime	50	Large Business Office Dishwasher Next Room
Quiet Urban, Nighttime Quiet Suburban, Nighttime	40	Theater, Large Conference Room (Background)
Quiet Rural, Nighttime	20	Library Bedroom at Night, Concert Hall (Background) Broadcast/Recording Studio
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans, 2016.

Noise levels from construction operations decrease at a rate of approximately 6 decibels (dBA) to 7.5 dBA per doubling of distance from sources. If the receptor is far from the noise source, other factors come into play. For example, barriers such as fences or buildings that break the line of sight between the source and the receiver typically reduce sound levels by at least 5 dBA. Likewise, wind can reduce noise levels by 20 to 30 dBA over long distances.

Given the site-specific characteristics of the developed park site (smooth ground surface without much vegetation), noise from construction activities is expected to attenuate at a rate of 6 dBA per doubling of distance. In the undeveloped park, noise levels would be expected to decrease at a rate of up to 7.5 dBA per doubling of distance. Assuming typical California construction

methods, interior noise levels are ±20 to 25 decibels lower than exterior noise levels with the windows closed.

In the developed park, noise levels could reach up to ±79.5 dBA at the exterior of the nearest residences on Main Street during construction of the restroom; interior noise levels at these residences are not expected to exceed ±59.5 dBA. In the undeveloped park, noise levels could reach up to ±71.5 dBA at the exterior of the nearest residences on Grand Rapids Avenue during construction of the access road; interior noise levels at these residences are not expected to exceed ±51.5 dBA. During construction of the trail in the undeveloped park, noise levels could reach ±73 dBA at the nearest residence immediately north of the park off of Bridge Street; interior noise levels are not expected to exceed ±53 dBA.

Although the County does not have noise thresholds for construction activities, **MM 4.13.1** is included to restrict construction activities to daytime hours to limit the expose of nearby residents to construction-related noise. **MM 4.13.2** requires that construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds. **MM 4.13.3** requires that any stationary equipment used during construction (generators, compressors, etc.) must be located at the furthest practical distance from nearby noise-sensitive land uses.

Operational Noise

Operational noise in the developed park would include vehicular traffic, parking lot activities (car doors closing, music, people conversing, and similar activities). The parking lot is existing and it is not expected that the proposed project would significantly increase noise levels at the parking lot because visitors to the park would be spread throughout the day. In addition, use of the restroom adjacent to the parking lot is not expected to generate excessive noise. Use of the trail and picnic areas in the park would generate noise associated with people conversing and occasional shouting, laughing, and similar noise associated with parks and recreational facilities. Noise levels from these activities are not expected to significantly increase ambient noise levels in the park.

Installation of a parking lot and trails in the undeveloped park would introduce a new noise source to the area. Noise would be generated from parking lot activities and users of the trail system. As is expected for the developed park, visitors to the undeveloped park would be spread throughout the day and it is not anticipated that the project would significantly increase ambient noise levels in proximity to the undeveloped park. Further, the park would be closed from dusk to dawn, and there would be no noise generated in the developed or undeveloped park during nighttime hours. Therefore, no mitigation is required to address potential operational noise.

With implementation of **MM 4.13.1, MM 4.13.2** and **MM 4.13.3**, the project's impacts associated with noise would be **less than significant**.

Question B

Excessive vibration during construction occurs only when high vibration equipment (e.g., compactors, large dozers, etc.) are operated. The proposed project may require limited use of equipment with high vibration levels during construction. The effects of ground-borne vibration include perceptible movement of building floors, rattling windows, shaking of items on shelves or hangings on walls, and rumbling sounds. In extreme cases, vibration can cause damage to buildings. Both human and structural response to ground-borne vibration is influenced by various factors, including ground surface, distance between the source and the receptor, and duration.

The most common measure used to quantify vibration amplitude is the peak particle velocity (PPV). PPV is a measurement of ground vibration defined as the maximum speed (measured in inches per second) at which a particle in the ground is moving relative to its inactive state.

Although there are no federal, state, or local regulations for ground-borne vibration, Caltrans has developed criteria for evaluating vibration impacts, both for potential structural damage and for human annoyance. The Caltrans Transportation and Construction Vibration Guidance Manual (2020), was referenced in the analysis of construction-related vibration impacts.

Table 4.13-2 includes the potential for damage to various building types as a result of ground-borne vibration. Transient sources include activities that create a single isolated vibration event, such as blasting. Continuous, frequent, or intermittent sources include use of bulldozers and vibratory compaction equipment.

TABLE 4.13-2
Structural Damage Thresholds from Ground-Borne Vibration

	Vibration Level (Inches per Second PPV			
Structure Type	Transient Sources	Continuous/ Frequent/ Intermittent Sources		
Older residential structures	0.5	0.3		
Newer residential structures	1.0	0.5		
Historic and some old buildings	0.5	0.25		
Newer industrial/commercial buildings	2.0	0.5		

Source: Caltrans, 2013

Table 4.13-3 indicates the potential for annoyance to humans as a result of ground-borne vibration.

TABLE 4.13-3 Human Response to Ground-Borne Vibration

	Vibration Level (Inches per Second PPV			
Human Response	Transient Sources	Continuous/ Frequent/ Intermittent Sources		
Barely Perceptible	0.04	0.01		
Distinctly Perceptible	0.25	0.04		
Strongly Perceptible	0.9	0.10		
Disturbing	2.0	0.4		

Source: Caltrans, 2013

Table 4.13-4 indicates vibration levels for various types of construction equipment that may be used for the proposed Project.

TABLE 4.13-4
Examples of Construction Equipment Ground-Borne Vibration

Equipment Type	Inches per Second PPV at 25 feet
Bulldozer (small)	0.003
Bulldozer (large)	0.089
Jackhammer	0.035
Loaded trucks	0.076
Vibratory roller	0.210

Source: Caltrans Transportation and Construction Vibration Guidance Manual, 2020.

Vibration levels from equipment use at varying distances from the source can be calculated using the following formula:

$$PPV_{Equipment} = PPV_{Ref} \times (25/D)^n$$

Based on this equation, a vibratory roller operating at a distance of 150 feet from a residence would generate a PPV of 0.035 inches per second, while a large bulldozer would generate a PPV of up to 0.015 inches per second. These vibration levels would be barely to distinctly perceptible but would not cause structural damage to buildings.

MM 4.13.1 would restrict construction activities to daytime hours and limit the exposure of nearby residents to noise and ground-borne vibration generated by construction activities. MM 4.3.1(h), MM 4.13.2, and MM 4.13.3 would further reduce construction-related impacts.

Because increased noise and ground-borne vibration are temporary and would cease upon completion of project construction, and mitigation measures would be implemented to reduce noise and ground-borne vibration during construction, impacts would be less than significant.

Question C

According to the Shasta County General Plan, the project area is not within an airport land use plan area. According to the Federal Aviation Administration (FAA), the nearest public airport is Fall River Mills Airport, approximately 0.67 miles northeast of the project area.

Although construction workers would be completing improvements less than two miles from the Airport, airport operations must comply with FAA Regulations, including the FAA Airport Safety Program, which addresses general aviation airport safety, runway safety, and safety management systems (SMS). These regulations were established, in part, to protect the health and safety of individuals living and working in proximity to an airport. The proposed project does not include any components that would introduce a substantial number of people to the area in the long-term; therefore, potential impacts are **less than significant.**

CUMULATIVE IMPACTS

As documented above, it is not anticipated that use of the park would result in a substantial permanent increase in ambient noise levels in the area. The proposed project would result in a temporary increase in daytime noise levels during construction activities. Other projects within the study area would also contribute to increases in noise levels during construction, and in some cases construction periods may overlap. However, all construction would take place in compliance with applicable policies governing noise levels. In addition, with implementation of **MM 4.13.1 through MM 4.13.3**, the proposed project's contribution to cumulative noise impacts would be less than significant.

MITIGATION

Implementation of MM 4.3.1(h).

- **MM 4.13.1** Construction activities shall be limited to between the hours of 7:00 a.m. and 5:00 p.m. Exceptions to these limitations may be approved by the District Director or their designee for activities that require interruption of utility services to allow work during low demand periods, or to alleviate traffic congestion and safety hazards.
- **MM 4.13.2** Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- **MM 4.13.3** Stationary construction equipment (generators, compressors, etc.) shall be located at the farthest practical distance from nearby noise-sensitive land uses.

DOCUMENTATION

- **California Department of Transportation.** 2020. Transportation and Construction Vibration Guidance Manual. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed August 2021.
- _____. 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol.

 https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf. Accessed August 2021.
- **Shasta County.** 2004. Shasta County General Plan, Chapter 5.5 (Noise). https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/docs/55noise.pdf?sfvrsn=631fbd43 0. Accessed August 2021.
- _____. Fall River Mills Airport Services and Information. https://www.co.shasta.ca.us/index/public-works/engineering/fall-river-mills-airport. Accessed August 2021.
- Federal Aviation Administration. 2021. Airport Facilities Data. https://www.faa.gov/airports/western_pacific/. Accessed August 2021.
- International Code Council. 2019. California Building Code, Part 2, Volume 1, Chapter 12 (Interior Environment). https://codes.iccsafe.org/content/CABCV12019JUL21S/chapter-12-interior-environment. Accessed September 2021.

4.14 POPULATION AND HOUSING

Would the project:

Issues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?				\boxtimes
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				\boxtimes

REGULATORY CONTEXT

There are no federal or local regulations pertaining to population or housing that apply to the proposed project.

STATE

California Government Code §65581

California Government Code §65581 *et seq.* requires a Housing Element to be included in all city and county General Plans. State Housing Element law mandates that jurisdictions provide sufficient land to accommodate a variety of housing opportunities for all economic segments of the community. Compliance with this requirement is measured by the jurisdiction's ability to provide adequate land to accommodate a share of the region's projected housing needs for the applicable planning period. This share is known as the Regional Housing Needs Allocation (RHNA).

DISCUSSION OF IMPACTS

Question A

The proposed project would improve the project site as a district park. No new housing, commercial or industrial space would be developed as part of the proposed project. The proposed project would not result in the conversion of adjacent land uses, or provide access to previously inaccessible areas. It would not provide additional major infrastructure or increase the capacity of the existing water system. Therefore, the proposed project would not directly or indirectly induce substantial population growth. There would be **no impact.**

Question B

The proposed park facilities would be located on land that is not currently developed with residential uses. The undeveloped park site is a natural open space area with no recorded previous development. There would be no displacement of people or housing necessitating the construction of replacement housing. Therefore, there would be **no impact**.

CUMULATIVE IMPACTS

As documented herein, the proposed project would not result in impacts to population or housing; therefore, the project would not contribute to adverse impacts associated with cumulative impacts to population or housing.

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None necessary.

DOCUMENTATION

Shasta County. 2004. Shasta County General Plan, Chapter 7.3 (2020-2028 Housing Element). https://www.co.shasta.ca.us/index/drm/planning/general-plan/2020-2028-housing-element. Accessed August 2021.

Shasta County. 2016. Shasta County Code of Ordinances, Title 17 (Zoning).
https://www.municode.com/library/ca/shasta_county/codes/code_of_ordinances?nodeld=CD_OR_D_TIT17ZO. Accessed August 2021.

4.15 Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Is	sues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Fire protection?			\boxtimes	
b.	Police protection?			\boxtimes	
C.	Schools?				
d.	Parks?				
e.	Other public facilities?				\boxtimes

REGULATORY CONTEXT

There are no federal, State, or local regulations pertaining to public services that apply to the proposed project.

DISCUSSION OF IMPACTS

Questions A

The Fall River Mills Fire Department provides fire and emergency medical services in the Fall River Mills area. The fire station is located centrally in Fall River Mills, 2.5 miles from the project area. The fire department employs a Fire Chief and relies on volunteer fire fighters. The department has several fire engines and wildland rescue vehicles. The department is managed and funded through the Fall River Mills Fire Protection District.

Implementation of the proposed project would improve the undeveloped and developed park to serve the surrounding residential neighborhoods and regional visitors. Use of the site could increase as a result of the proposed improvements. However, visitors to the site are anticipated to come primarily from the local area, generally within walking distance of the project site. Because proposed

improvements would be for recreation, and would not include housing units or commercial structures, the incremental increase in demand for fire protection services would not be significant and would not exceed the physical or financial capabilities of the Fall River Mills Fire Protection District. There would be no need for new or expanded facilities or services. In addition, proposed improvements would increase access on the undeveloped parcel for fire vehicles to inspect and monitor the natural open space area. Therefore, impacts to fire protection would be **less than significant.**

Question B

The Shasta County Sheriff's Office provides police protection services in Fall River Mills, including the project area. The Sheriff's Office covers approximately 3,700 square miles of unincorporated area of Shasta County. The Burney station is the closest to the project area, approximately 17.2 miles away. Implementation of the proposed project would improve the site to a park that serves the surrounding neighborhoods and regional visitors. Use of the site could increase as a result of the proposed improvements. However, visitors to the site are anticipated to come primarily from the local area, generally within walking distance of the project site. Because proposed improvements would be for recreation, and would not include housing units, commercial structures, or overnight camping, the incremental increase in demand for police protection services would not be significant and would not exceed the physical or financial capabilities of the Sheriff's Office. There would be no need for new or expanded facilities or services. In addition, provision of the proposed park would enhance the quality of life for the community, which may promote community cohesion and reduce overall crime. Therefore, impacts to police protection services would be **less than significant**.

Question C

The project area is within the Fall River Joint Unified School District, which operates the elementary, middle, and high school for the region. Fall River Elementary is approximately 0.3 miles from the project area. The middle and high school are located in McArthur. Implementation of the proposed project would not result in any local or regional population increases. Therefore, the project would not require construction of new schools, or result in schools exceeding their capacity. Therefore, the project would have **no impact.**

Question D

Implementation of the proposed project would improve the site as a park to serve nearby residential development and regional visitors. As documented in this Initial Study, the proposed park improvements would not result in substantial adverse physical impacts that could cause environmental impacts. Therefore, the project would have **no impact**.

Question E

Other public facilities would include facilities such as libraries, post offices, meeting rooms, or hospitals. Because the project would not result in any local or regional population increase, it would not result in substantial adverse physical impacts associated with the provision of the public facilities. Therefore, the project would have **no impact**.

CUMULATIVE IMPACTS

As documented above, the proposed project would not require the construction or expansion of public facilities or services; therefore, no cumulatively considerable impacts would occur.

MITIGATION

None necessary.

DOCUMENTATION

Shasta County. 2004. Shasta County General Plan, Chapter 7.5 (Public Facilities). https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/docs/75pubfac.pdf?sfvrsn=114df4b5_0. Accessed August 2021.

4.16 RECREATION

Is	ssues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				\boxtimes
b.	Does the project include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?		\boxtimes		

REGULATORY CONTEXT

There are no federal or State regulations pertaining to public services that apply to the proposed project.

LOCAL

Shasta County

The Shasta County General Plan includes the following Objective and Policy that apply to the proposed project:

Chapter 6.9,	Chapter 6.9, Open Space and Recreation					
Objective:	OSR-1	Protection of the open space and recreation resources of Shasta County for the use and enjoyment by County residents both now and in the future				
	OSR-2	Provision of public access to open space and recreation resources consistent with the need to protect these resources and the rights of private property owners.				
Policies:	OSR-b	Parks and recreation systems planning, acquisition, development, and operation should be coordinated among City, County, State, and Federal governments, as well as schools and special districts, and should take advantage of opportunities for linkages between publicly-owned parks and publicly-owned open space lands.				

DISCUSSION OF IMPACTS

Questions A

There are several recreational facilities within a one-half mile of the project area. The Pit River access off of Cassel Fall River Road is directly east of the developed park area, and is maintained by

Initial Study: Fall River Valley CSD, Two Rivers Park Project

PG&E. The Pit River access serves as a launch point for kayakers and river enthusiasts. The largest recreation attraction for the District is the privately-owned Fall River Valley Golf Course and Country Club. The golf course is directly west of the undeveloped park site. Finally, Fall River Mills has several smaller recreation facilities such as the County-owned baseball diamond, park, and Fall River Mills Veterans Hall; and an outdoor recreation facility at the Fall River Elementary School.

The proposed project would enhance amenities in the developed park and establish parking and a trail system in the undeveloped park. These improvements would bring people to the area; however, it is not anticipated that the project would increase the use of other parks and recreational facilities in the area in a manner that would result in deterioration of the facilities.

As discussed in Section 4.14 (Population and Housing), the proposed project would not increase population or employment opportunities that could result in increased use of existing recreational facilities on or near the project site. Therefore, the project would have **no impact** related to the increased use and subsequent deterioration of existing recreational facilities.

Question B

Potential impacts of the proposed park improvements are analyzed in applicable sections of this Initial Study. The mitigation measures identified in Section 1.10 (Summary of Mitigation Measures) are included to ensure that potential adverse effects associated with the proposed improvements are **less than significant.**

CUMULATIVE IMPACTS

As documented above, the proposed project would not lead to increased use or deterioration of existing facilities. Potential effects associated with the proposed park improvements are addressed with the mitigation measures identified in Section 1.10 (Summary of Mitigation Measures). Implementation of these mitigation measures ensures that the project's cumulative impacts are **less than significant**.

MITIGATION

Implementation of the mitigation measures identified in Section 1.10 (Summary of Mitigation Measures).

DOCUMENTATION

Shasta County. 2004. Shasta County General Plan, Chapter 6.9 (Open Space and Recreation). https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/docs/69open.pdf?sfvrsn=e34317a1_0. Accessed August 2021

4.17 TRANSPORTATION

Would the project:

Is	ssues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?				
b.	Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)? (criteria for analyzing transportation impacts – vehicle miles traveled).				
C.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d.	Result in inadequate emergency access?			\boxtimes	

REGULATORY CONTEXT

FEDERAL

There are no federal regulations pertaining to transportation/traffic that apply to the proposed project.

STATE

California Environmental Quality Act

SB 743 of 2013 (CEQA Guidelines §15064.3 *et seq.*) was enacted as a means to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHGs. Pursuant to SB 743, traffic congestion is no longer considered a significant impact on the environment under CEQA. The new metric bases the traffic impact analysis on vehicle-miles travelled (VMT). VMT refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT, including whether to express the change in absolute terms, per capita, per household, or in any other measure.

LOCAL

Shasta Regional Transportation Agency

The Shasta Regional Transportation Agency (SRTA) is a legally separate public agency that studies the region's transportation needs and pursues funding for the planning, construction, operation, and maintenance of transportation projects throughout Shasta County. SRTA approved the 2018 Regional Transportation Plan and Sustainable Communities Strategy to meet state transportation planning requirements and effectively plan for a multi-modal future in Shasta County. SRTA also prepared the GoShasta Regional Active Transportation Plan in 2018 (updated in 2019) that addresses development of programs and infrastructure for walking, bicycling, and connecting to transit in the County. There are no specific goals, objectives, or strategies in the Regional Transportation Plan or GoShasta Regional Active Transportation Plan that apply to this project.

Shasta County

The Shasta County General Plan includes the following Objectives that apply to the proposed project:

Chapter 7.4, Circulation					
Objectives:	C-1	Existing road capacity available within the County road system should be used to serve future development prior to constructing new County maintained roads.			
	C-2	Recognition of the private automobile as currently the primary means of personal transportation in Shasta County, combined with development of a land use pattern which accommodates and encourages alternative modes of transportation, including public transit to reduce vehicle trips, vehicle miles traveled, energy consumption, and contributes to the maintenance and improvement of the County's air quality.			
	C-5	Recognize pedestrian and bicycle circulation as functional alternatives to the automobile in urban and suburban areas.			
	C-5c	The County shall work with RTPA to implement the recommendations for development and improvement of bikeways and bicycle facilities as described in the County's adopted Bikeway Plan. New development projects should be evaluated for their consistency with the County Bikeway Plan. Where appropriate, new development should dedicate land and/or construct/install bicycle facilities.			

DISCUSSION OF IMPACTS

Questions A and B

The proposed project would not, either directly or indirectly, result in an increase in housing or commercial/industrial development that would cause an increase in traffic in the area. The project does not have any components that would interfere with any existing or planned transit stops, bicycle lanes, or pedestrian facilities. As such, implementation of the proposed project would not substantially affect the surrounding transportation network in the long term, and would not conflict with existing plans, ordinances, policies, or programs.

Vehicle Miles Traveled

Pursuant to CEQA §21099, the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."

As stated in the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (April 2018), in rural areas, fewer options may be available for reducing VMT, and significance thresholds may be best determined on a case-by-case basis.

The proposed project improves an existing park, but it is not anticipated that improvements would significantly increase vehicular traffic to the park. A site visit conducted on August 31, 2021, showed that there are a number of informal roads on the undeveloped park site that appear to be used for access to the undeveloped site. Because there is already vehicle access and use of the site, albeit informal in some cases, it is not anticipated that VMT would significantly increase over existing conditions as a result of improvements in the undeveloped park. In addition, both the developed and undeveloped parks would primarily be used by local residents who could walk or bike to the sites. Therefore, a significant permanent increase in VMT in the area is not expected.

There would be short-term increases in traffic in the area associated with construction workers and equipment, but there are no planned closures for public roads. If closures are required County code requires the development and implementation of temporary traffic controls that adhere to procedures, methods, and guidance in the current edition of the California Manual on Uniform Traffic Control Devices (California MUTCD). Impacts would be **less than significant**.

Question C

The proposed project would extend an existing County road (Grand Rapids Avenue) to provide access to a parking lot on the undeveloped park site. Presently, Grand Rapids Avenue dead-ends with a turnaround, approximately 100 feet past the last residential home on the street. The parking lot will be designed to allow vehicles to safely enter, park, and turn around. The State Fire Code requires dead-end roads to be designed in a way to support safe travel and turn-around points for fire vehicles. The County Fire Marshal is charged with review of development plans to ensure compliance with the State code. The developed park site would not change existing transportation infrastructure. Implementation of the State Fire Code would ensure that the project does not contribute to hazardous transportation situations; impacts would be **less than significant.**

Question D

As stated in Section 4.9 (Hazards and Hazardous Materials) under Question F, a temporary increase in traffic could occur during construction and could interfere with emergency response access, but construction related traffic would be minor due to the overall scale of the construction activities. Pursuant to Cal/OSHA requirements, temporary traffic control during completion of activities that require work in the public right-of-way is required and must adhere to the procedures, methods, and guidance given in the current edition of the California Manual on Uniform Traffic Control Devices. Emergency access would be maintained throughout construction.

When operational, the project would not significantly increase the daily number of cars entering and exiting the park or the neighborhood to such an extent that traffic congestion that could impede emergency access. Therefore, impacts would be **less than significant**.

CUMULATIVE IMPACTS

Construction-related traffic would be minor due to the overall scale of the construction activities. Further, construction-related traffic for the cumulative projects would be spread over the duration of the construction schedules and would be minimal on a daily basis. In addition, temporary traffic control is required for all projects that require work in the public ROW to protect the travelling public. As documented above, it is not anticipated that a significant permanent increase in VMT in the area would occur. Both the developed and undeveloped parks would primarily be used by local residents who could walk or bike to the sites. Therefore, the project's cumulative transportation impacts would be less than significant.

MITIGATION

None necessary.

DOCUMENTATION

Shasta County. 2010. Shasta County 2010 Bicycle Transportation Plan.
https://www.srta.ca.gov/DocumentCenter/View/3244/ShastaCountyBikePlan2010. Accessed September 2021.

Shasta Regional Transportation Agency. 2019. GoSha https://www.srta.ca.gov/286/GoShasta-Plan-Active-Tra				
2018. Regional Transportation Plan and Sustaina Region. https://www.srta.ca.gov/DocumentCenter/Vie-PlanSustainable-Communities-Strategy-adopted-Oct 2021 .	w/4285/2018	-Regional-Tran	sportation-	а
Office of Planning and Research. 2018. Technical Advi in CEQA. http://opr.ca.gov/docs/20190122-743_Technical-2021 .				cts
4.18 TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the defined in Public Resources Code (PRC) section 21074 as either that is geographically defined in terms of the size and scope of cultural value to a California Native American tribe, and that is:	her a site, fea f the landsca	ature, place, cu	Itural landsc	ape
Issues and Supporting Evidence	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
. A resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)?		\boxtimes		
A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth PRC section 5024.1(c)? In applying the criteria set forth in PRC Section 5024.1(c), the lead agency shall consider the significance of the resource to a California Native American tribe.				
REGULATORY CONTEXT				
There are no federal or local regulations pertaining to tribal cul project.	tural resource	es that apply to	the propose	ed
STATE				
California Environmental Quality Act				
Assembly Bill 52 of 2014 (Public Resources Code [PRC] §210 effect that may cause a substantial adverse change in the sign project that may have a significant effect on the environment." may have such an effect, a lead agency is required to consult is traditionally and culturally affiliated with the geographic area	nificance of a In order to d with a Califor	<i>tribal cultural re</i> etermine wheth nia Native Ame	es <i>ource is a</i> ner a project	
 The tribe requested to the lead agency, in writing, to be proposed projects in the geographical area; and 	e informed th	rough formal n	otification of	

_. 2004. Shasta County General Plan, Chapter 7.4 (Circulation). https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/docs/74circ.pdf?sfvrsn=84905afd 0. Accessed September 2021. 2. The tribe responds, in writing, within 30 days of receipt of the formal notification and requests the consultation.

The consultation must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report. Pursuant to PRC §21084.3, lead agencies must, when feasible, avoid damaging effects to a tribal cultural resource and must consider measures to mitigate any identified impact.

PRC §21074 defines "tribal cultural resources" as either of the following:

- 1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the CRHR; or are included in a local register of historical resources as defined in PRC §5020.1(k).
- 2. A resource determined by the lead agency, taking into consideration the significance of the resource to a California Native American tribe, to be significant pursuant to criteria set forth in PRC §5024.1(c).

In addition, a cultural landscape that meets one of these criteria is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. A historical resource described in §21084.1, a unique archaeological resource as defined in §21083.2(g), or a "nonunique archaeological resource" as defined in §21083.2(h) may also be a tribal cultural resource if it meets one of these criteria.

DISCUSSION OF IMPACTS

Questions A and B

See discussion in Section 1.8 (Tribal Consultation) and Section 4.5 under Questions A and B. **MM 4.5.3** is included to ensure that improvements in the undeveloped park avoid impacts to tribal cultural resources by requiring the District to request that the Ajumawi Band review the final plans to ensure avoidance of tribal cultural resources. For both the developed and undeveloped park improvements, **MM 4.5.4** and **MM 4.5.5** are included to ensure that the Ajumawi Band of the Pit River Nation is provided an opportunity to monitor earth disturbing activities. Implementation of **MM 4.5.3** through **MM 4.5.5** ensures that impacts on tribal cultural resources are **less than significant**.

CUMULATIVE IMPACTS

Cumulative projects in the vicinity of the project area have the potential to impact tribal cultural resources. Tribal cultural resources are afforded special legal protections designed to reduce the cumulative effects of development. Potential cumulative projects and the proposed project would be subject to the protection of tribal cultural resources afforded by PRC §21084.3. Given the non-renewable nature of tribal cultural resources, any impact to tribal cultural sites, features, places, landscapes, or objects could be considered cumulatively considerable. As discussed above, **MM 4.5.3 through 4.5.5** avoid potential impacts on tribal cultural resources; therefore, the proposed project would have less than significant cumulative impacts to tribal cultural resources.

MITIGATION

Implementation of MM 4.5.3 through MM 4.5.6.

DOCUMENTATION

ENPLAN. 2021. Cultural Resources Inventory: Fall River Valley Community Services District, Two Rivers Park Project. Confidential document on file at NEIC/CHRIS.

Initial Study: Fall River Valley CSD, Two Rivers Park Project

4.19 UTILITIES AND SERVICE SYSTEMS

Would the project:

Issues and Supporting Evidence		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities the construction of which could cause significant environmental effects?				
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				
C.	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?				
d.	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			\boxtimes	
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			\boxtimes	

REGULATORY CONTEXT

There are no federal or local regulations pertaining to utilities and service systems that apply to the proposed project.

STATE

California Integrated Waste Management Act

The California Integrated Waste Management Act (CIWMA) of 1989, as amended, was enacted to reduce, recycle, and reuse solid waste generated in the State. The CIWMA requires cities and counties to divert 50 percent of the total waste stream from landfill disposal. Under the CIWMA, cities and counties must prepare Solid Waste Management Plans and Source Reduction and Recycling Elements to implement CIWMA goals.

California Building Standards Code

The CALGreen Code, included as Part 11 of the CBSC, includes requirements for construction waste reduction, disposal, and recycling. The intent of this requirement is to reduce the amount of waste from new construction and demolition that would be sent to landfills, and to encourage reuse and recycling of construction waste products (e.g., carpet, wood, aggregate, shingles, wallboard, and other materials that have recyclable value). A minimum of 65 percent of nonhazardous construction and demolition waste must be recycled and/or salvaged for reuse. The CALGreen Code also includes mandatory water conservation measures for both indoor and outdoor water use. Indoor measures require the use of water conserving plumbing fixtures and fittings.

DISCUSSION OF IMPACTS

Question A

The proposed drinking fountain would connect to existing water infrastructure from the original feed store. The restroom would connect to existing water, wastewater, and electric infrastructure available at the project site. No infrastructure would be extended to or needed for the undeveloped park area. Although the proposed project would increase water use and generate wastewater, the existing water and wastewater treatment facilities are adequate to serve the proposed project. Therefore, impacts would be **less than significant.**

Question B

The proposed project would utilize the existing water connection to provide domestic water for the restroom and drinking water for the water fountain in the picnic pavilion. The proposed project's water demand would be minimal due to limited use by park patrons during daytime hours. The District has sufficient water supplies to serve the project and other reasonably foreseeable future development projects during normal, dry, and multiple dry years; impacts would be **less than significant**.

Question C

The District provides wastewater collection and treatment services to residents and businesses in the community of Fall River Mills. According to the draft Municipal Service Review completed for FRVCSD by the Shasta Local Agency Formation Commission (LAFCO) in 2012, the sewer system includes 25,000 linear feet of gravity-fed effluent collection mainlines, 6,000 linear feet of pressure force mains, and three underground sewer lift stations. About 60,000 gallons per day of domestic wastes are conveyed to the District's wastewater treatment plant (WWTP) located adjacent to the Fall River Mills Airport.

The proposed project would result in a relatively small increase in wastewater from the restroom. The WWTP at this time has ample capacity to service the proposed project. The proposed project would not lead to an increase in residential or commercial development. Therefore, the proposed project would have a **less-than-significant impact**.

Questions D and E

The District's contractor would be responsible for disposing of all construction waste in accordance with existing State and local regulations. As discussed under Regulatory Context, the CALGreen Code requires that a Construction Waste Management Plan be submitted with the building permit application and approved by the Building Official prior to issuance of a building permit. Because the County's Building Official would ensure compliance through the plan check and inspection processes, impacts during construction would be **less than significant**.

The proposed project includes installation of new waste recycling bins throughout the developed and undeveloped park sites, and new garbage bins in the restroom for restroom waste. The District would maintain the garbage and waste recycling bins. Relatively small amounts of trash would be collected and taken to the landfill. Therefore, operational impacts would be **less than significant.**

CUMULATIVE IMPACTS

Cumulative projects, including growth resulting from build-out of the County's General Plan, would result in the need for new utility infrastructure. There would also be an increased demand for potable water, and wastewater treatment, and increased generation of solid waste.

All new development projects are reviewed on a case-by-case basis to determine the need for new or expanded infrastructure improvements. Required improvements are constructed in accordance with local

Initial Study: Fall River Valley CSD, Two Rivers Park Project

and State requirements, and any required mitigation measures are identified during the environmental review process to ensure that impacts are less than significant. During drought years, the District is subject to State-adopted emergency water use restrictions.

In addition, all development projects are required to comply with local and State regulations pertaining to solid waste disposal and recycling. Compliance with existing local and State regulations ensures that the proposed project's contribution to cumulative impacts to utility and service systems is less than significant.

MITIGATION		
None necessary.		
DOCUMENTATION		

CalRecycle. 2019. Estimated Solid Waste Generation Rates. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates. Accessed August 2021.

Shasta County. 2004. Shasta County General Plan, Chapter 7.5 (Public Facilities). http://www.co.shasta.ca.us/docs/Resource_Management/docs/75pubfac.pdf?sfvrsn=0. Accessed August 2021.

4.20 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Issues and Supporting Evidence		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?				
b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			\boxtimes	
C.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			\boxtimes	

REGULATORY CONTEXT

FEDERAL

There are no federal regulations pertaining to wildfire that apply to the proposed project.

STATE

California Department of Forestry and Fire Protection (CAL FIRE)

The Bates Bill (AB 337), enacted in 1992, required CAL FIRE to work with local governments to identify high fire hazard severity zones throughout each county in the State. CAL FIRE adopted Fire Hazard Severity Zone (FHSZ) Maps for State Responsibility Areas (SRAs) in November 2007. Pursuant to California Government Code §51175-51189, CAL FIRE also recommended FHSZs for Local Responsibility Areas (LRAs). Over the years, CAL FIRE has updated the maps and provided new recommendations to local governments based on fire hazard modeling.

The fire hazard model considers wildland fuels (natural vegetation that burns during the wildfire); topography (fires burn faster as they burn up-slope); weather (fire burns faster and with more intensity when air temperature is high, relative humidity is low, and winds are strong); and ember production and movement (how far embers move and how receptive the landing site is to new fires). The model recognizes that some areas of California have more frequent and severe wildfires than other areas. The proposed project is located in a State Responsibility Area with a High and Very High designation.

California Fire and Building Codes

California Fire Code, Part 9, Chapter 49 (Wildland-Urban Interface Fire Areas), and California Building Code Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure) include standards for new construction in Wildland-Urban Interface Fire Areas (fire hazard severity zones). A Wildland-Urban Interface Fire Area is defined as a geographic area identified by the State as a Fire Hazard Severity Zone in accordance with PRC §4291 through §4204, and Government Code §51175 through §51189, or other areas designated by the local enforcing agency to be at a significant risk from wildfires. The purpose of the standards is to prevent a building from being ignited by flying embers that can travel as much as a mile away from a wildfire and to contribute to a systematic reduction in fire-related losses through the use of performance and prescriptive requirements.

LOCAL

Shasta County

The Shasta County General Plan includes the following Objectives that apply to the proposed project:

Chapter 5.4, Fire Safety and Sheriff Protection			
Objective:	FS-1	Protect development from wildland and non-wildland fires by requiring new development projects to incorporate effective site and building design measures commensurate with level of potential risk presented by such a hazard and by discouraging and/or preventing development from locating in high risk fire hazard areas.	
Policies:	FS-a	All new land use projects shall conform to the County Fire Safety Standards.	
	FS-b	Known fire hazard information should be reported as part of every General Plan amendment, zone change, use permit, variance, building site approval, and all other land development applications subject to the requirements of the California Environmental Quality Act (CEQA).	

Shasta County Municipal Code Chapters 8.08 and 8.10 establish regulations regarding fire hazard abatement and defensible space within the County. The County municipal code states the County Fire Warden has jurisdiction over the project site and its compliance with these codes.

DISCUSSION OF IMPACTS

Question A

See Section 4.9 (Hazards and Hazardous Materials), Question G, for a discussion of potential construction-related impacts. Emergency access to the developed park site would be from existing driveways off of Main Street. Emergency access for the undeveloped site would be from the proposed extension of Grand Rapids Avenue into the proposed new parking area. The proposed project would improve emergency access to the undeveloped park area and not hinder existing access on the developed park area. Therefore, the project would not impair an emergency response plan or emergency evacuation plan; impacts would be less than significant.

Question B

As discussed under Regulatory Context above, the project area is within a High Fire Hazard Severity Zone State Responsibility Area as designated by State Board of Forestry and Fire Protection. As such, the project is subject to Chapter 7A of the CBC (Materials and Construction Methods for Exterior Wildfire Exposure). The purpose of Chapter 7A is to protect life and property by increasing the ability of a building to resist the intrusion of flames or burning embers projected by a vegetation fire. In addition to specific requirements related to ignition-resistant construction, roofing, vents, exterior coverings, exterior windows and doors, and decking, these provisions mandate that the proposed project comply with CGC §51182, which requires a minimum of 100 feet of defensible space be maintained around each side of an occupied structure.

During construction, the District's contractor is required to comply with applicable State fire codes and Cal/OSHA regulations adopted to minimize potential fire risks associated with construction activities.

There are no other factors associated with the project, such as slope or prevailing winds, that would exacerbate wildfire risks and expose individuals in the area to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

The County's Building Official must confirm that required building code measures are implemented into the construction plans for the restroom. Compliance with defensible space requirements is confirmed by the Building Official prior to building permit final approval. In accordance with Shasta County Municipal Code Chapter 8.10, it is the duty of the Fire Warden or the Fire District have the authority to inspect and enforce to identify areas with vegetation or other material that is likely to become ignited, and to notify the property owner of corrective actions needed to reduce the risks of wildfires.

Because the project will comply with existing local and State codes intended to reduce the risk of wildfire, including the requirement to maintain defensible space, the project would not exacerbate wildfire risks or expose individuals in the area to pollutant concentrations from a wildfire; impacts would be **less than significant.**

Question C

The proposed project would not require the installation of infrastructure that could exacerbate fire hazards (e.g., power lines in vegetated areas); would not construct roads or otherwise intrude into natural spaces in a manner that would increase wildfire hazard in the long term; and would not require installation of emergency water sources, or other fire prevention/suppression infrastructure. Therefore, the increased risk of fire due to project infrastructure and the potential for ongoing impacts due to fire-related infrastructure are **less than significant.**

Question D

The proposed project would not expose people or structures to significant post-fire risks. The developed portion of the project area is gently sloped toward the Pit and Fall River convergence with

little potential for post-fire erosion, landslides, or other slope instability events. The undeveloped portion of the park areas does have at least a 10 percent slope toward the Fall and Pit River convergence but will not be disturbed as part of this project; therefore, the proposed project would not increase the potential for post-fire erosion, landslides, or other slope instability events. A majority of the park area is within an existing floodplain that would not be impacted or changed post-fire. Therefore, the proposed project would haves **less-than-significant impact**.

CUMULATIVE IMPACTS

The proposed project would not impair an adopted emergency response plan or emergency evacuation plan; therefore, it would not contribute to cumulative impacts related to such plans. In addition, the proposed project would not contribute individually or cumulatively to increased risks associated with post-fire hazards. Because the project area is located in a High Fire Hazard Severity Zone State Responsibility Area, all new construction is required to comply with State Building and Fire Codes that were adopted to protect life and property from wildfire risks. Because the proposed project will comply with adopted standards related to wildfire risks, the project's cumulative impact to increased risks of wildfire would be **less than significant**.

MITIGATION

None necessary.

DOCUMENTATION

- California Department of Forestry and Fire Protection (CAL FIRE). 2021. Fire Hazard Severity Zone Map Viewer. https://egis.fire.ca.gov/FHSZ/. Accessed August 2021.
- **Shasta County.** 2007. Shasta County General Plan: Chapter 5.4 Fire Safety and Sheriff Protection. https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/docs/54firesafety.pdf?sfvrsn=204962bd 0. Accessed August 2021.
- **Shasta County.** 2017. Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan. https://www.co.shasta.ca.us/docs/libraries/public-works-docs/hmp-documents/shasta-county-hazard-mitigation-plan-november-2017.pdf. Accessed August 2021.
- Shasta County. Shasta County Municipal Code.

 https://library.municode.com/ca/shasta_county/codes/municipal_code?nodeld=CD_ORD_TIT8HE_SA_CH8.08FIHARE. Accessed August 2021.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

Issues and Supporting Evidence		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?				
b.	Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a 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.				
C.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		\boxtimes		

DISCUSSION OF IMPACTS

Question A

As discussed in the applicable environmental resources sections above, the proposed project could result in temporarily increased air emissions, impacts on special-status plants (if present), disturbance of nesting birds (if present), indirect impacts on wetlands and other waters of the U.S./State, the introduction and spread of noxious weeds during construction, impacts on cultural and tribal cultural resources (if present), impacts on paleontological resources (if present), and temporarily increased noise and vibration levels. However, the mitigation measures identified in Section 1.10 are included to reduce all potential impacts to a less-than-significant level.

Question B

The potential cumulative impacts of the proposed project have been analyzed within the discussion of each environmental resource area above. The mitigation measures identified in Section 1.10 reduce all potential impacts to a less-than-significant level.

Question C

As discussed in the applicable environmental resource sections above, the proposed project could result in adverse effects on human beings due to temporarily increased air emissions and temporary construction-related noise and vibration levels. However, mitigation measures are included to reduce all potential impacts to a less-than-significant level.

SECTION 5.0 LIST OF PREPARERS

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Fall River Valley Community Services District

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SECTION 6.0 ABBREVIATIONS AND ACRONYMNS

AB Assembly Bill

AQMD Air Quality Management District
APCD Air Pollution Control District
APE Area of Potential Effects
ASR Archaeological Survey Report

BMP Best Management Practice

CAA Clean Air Act

CAAQS California Ambient Air Quality Standards
CalARP California Accidental Release Prevention
CalEEMod California Emissions Estimator Model

CalEPA California Environmental Protection Agency

CAL FIRE California Department of Forestry and Fire Protection
Cal/OSHA California Occupational Safety and Health Administration

Caltrans California Department of Transportation

CAP Criteria Air Pollutants

CARB California Air Resources Board

CASGEM California Statewide Groundwater Elevation Monitoring

CBC California Building Code

CBSC California Building Standards Code
CCR California Code of Regulations

CDFW California Department of Fish and Wildlife
CEQA California Environmental Quality Act

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CESA California Endangered Species Act

CFR Code of Federal Regulations
CGS California Geological Survey

CH₄ Methane

CIWMA California Integrated Waste Management Act
CIWMB California Integrated Waste Management Board

CNDDB California Natural Diversity Data Base

CO Carbon Monoxide CO₂ Carbon Dioxide

CO₂e Carbon Dioxide Equivalent

County Shasta County

CRHR California Register of Historical Resources

CRI Cultural Resources Inventory

CVRWQCB Central Valley Regional Water Quality Control Board

CWA Clean Water Act
CY Cubic Yards

dBA Decibels

District Fall River Valley Community Services District

DOC Department of Conservation

DTSC California Department of Toxic Substances Control

DWSRF Drinking Water State Revolving Fund

EHD Environmental Health Department

EO Executive Order

ESA Environmental Site Assessment

FEMA Federal Emergency Management Act FESA Federal Endangered Species Act

FHSZ Fire Hazard Severity Zone

FMMP Farmland Mapping and Monitoring Program
FRVCSD Fall River Valley Community Services District

GC Government Code

GHG Greenhouse Gas Emissions
GSP Groundwater Sustainability Plans

GWP Global Warming Potential

H₂S Hydrogen Sulfide

HCP Habitat Conservation Plan

HFC Hydrofluorocarbons
HMP Hazard Mitigation Plan

HSC California Health and Safety Code

IBC International Building CodeIM Implementation Measure

ISWMRA Integrated Solid Waste Management Regional Authority

IS Initial Study

LRA Local Responsibility Area

MACT Maximum Achievable Control Technology

MCL Maximum Contaminant Level
mg/m³ Milligrams per Cubic Meter
MND Mitigated Negative Declaration
MPO Metropolitan Planning Organization

MRZ Mineral Resource Zone

MS4 Municipal Separate Storm Sewer System

MBTA Migratory Bird Treaty Act

NAAQS National Ambient Air Quality Standards
NAHC Native American Heritage Commission
NCCP Natural Community Conservation Plan

NEIC/CHRIS Northeast Information Center/California Historical Resources Information System

NF₃ Nitrogen Trifluoride

NFIP National Flood Insurance Program
NHPA National Historic Preservation Act
NMFS National Marine Fisheries Service

N2
 Nitrogen
 N2O
 Nitrous Oxide
 NO
 Nitric Oxide
 NOI
 Notice of Intent
 NO2
 Nitrogen Dioxide
 NOx
 Oxides of Nitrogen

NPDES National Pollutant Discharge Elimination System

NPPA California Native Plant Protection Act
NRCS Natural Resources Conservation Service
NRHP National Register of Historic Places

NSVAB Northern Sacramento Valley Air Basin

NWP Nationwide Permit

 O_2 Oxygen O_3 Ozone

OHWM Ordinary High-Water Mark

OSHA Occupational Safety and Health Act

Pb Lead

PCB Polychlorinated biphenyls

PCP Pentachlorophenol PFC Perfluorocarbons

PM _{2.5} Particulate Matter, 2.5 microns in size PM₁₀ Particulate Matter, 10 microns in size

PPB Parts per Billion
PPM Parts per Million

PRC Public Resources Code
PRV Pressure Reducing Valve

Project/ Fall River Valley Community Services District, Two Rivers Park

Proposed Project

PV Photovoltaic

PVC Polyvinyl Chloride

RCRA Resource Conservation and Recovery Act

RMP Risk Management Plan ROG Reactive Organic Gases

ROW Right-of-Way

RTP Regional Transportation Plan

RTPA Regional Transportation Planning Agency
RWQCB Regional Water Quality Control Board

SB Senate Bill

SCAPCD Shasta County Air Pollution Control District

SCEHD Shasta County Environmental Health Department

SF₆ Sulfur Hexafluoride

SGMA Sustainable Groundwater Management Act

SIP State Implementation Plan

SMARA The Surface Mining and Reclamation Act

SO₂ Sulfur Dioxide

SO₄ Sulfates SO_x Sulfur Oxides

SRA State Responsibility Area

SUSWMP Standard Urban Storm Water Management Plan

SWPPP Stormwater Pollution Prevention Plan SWRCB State Water Resources Control Board

TAC Toxic Air Contaminants

TPH Total Petroleum Hydrocarbons
TPZ Timberland Production Zone

U.S. United States

USACE United States Army Corps of Engineers
USDOT United States Department of Transportation
USEPA United States Environmental Protection Agency

USFWS United States Fish and Wildlife Service

VMT Vehicle Miles Travelled

VOC Volatile Organic Compounds

WDRs Waste Discharge Requirements

μg/m³ Micrograms per Cubic Meter

APPENDIX A

CALEEMOD AIR QUALITY/GREENHOUSE GAS EMISSIONS OUTPUT FILES

APPENDIX B BIOLOGICAL RESOURCES DOCUMENTATION