

Department of Development Services

Paula Daneluk, Director Pete Calarco, Assistant Director

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buttecounty.net/dds

BUTTE COUNTY ZONING ADMINISTRATOR NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION AND NOTICE OF PUBLIC HEARING TENTATIVE PARCEL MAP TPM18-0006

In accordance with the California Environmental Quality Act (CEQA), Butte County has prepared an Initial Study and is considering the adoption of a Mitigated Negative Declaration for the project listed below at a public hearing before the Butte County Zoning Administrator to be held on **May 27, 2020 at 10:00 am.** Due to protocols established for COVID 19 community response, this hearing will be held via an online format. Members of the public who wish to participate in public comment are encouraged to register in advance of the hearing by emailing PCClerk@buttecounty.net. Use the following information to remotely view and participate in the Planning Commission meeting, including the Public Hearing portions, online:

Link: https://bcdds.net/ZA_27MAY20
Event (Meeting) Number: 626 892 809

01

Phone number: United States Toll Free: 1-844-992-4726, Access Code: 626 892 809

Event Password: Zoning

Project Information

Project: Tentative Parcel Map TPM18-0006 (Carole Kelly Lotti)

Location: The project site is located at 6000 Cohasset Road, 1,000 feet south from the intersection of

Cohasset Road and Keefer Road, and 1.5 miles north of the City of Chico.

APN: 047-230-060

Proposal: Tentative Parcel Map to subdivide a 40.59 acre property situated in the FR-20/ALUC/DH (Foothill Residential – 20-acre minimum/Airport Compatibility Overlay/Deer Herd Migration Overlay) zone into two parcels of 20.00 acres (Parcel 1) and 20.59 acres (Parcel 2). Wastewater disposal for each parcel would be provided by on-site septic systems. Domestic water for each parcel would be provided by wells.

The California Environmental Quality Act (CEQA) requires this notice to disclose whether any listed toxic sites are present on the project site. The project site does not contain a listed toxic site.

The Initial Study/Mitigated Negative Declaration (IS/MND) and reference documents for this project are on file for public review and comment starting **April 27, 2020, through May 26, 2020**, at the Butte County Planning Division, 7 County Center Drive, Oroville, CA 95965. The IS/MND is also available for review on the County website at http://www.buttecounty.net/dds/Planning/CEQA.aspx.

Comments regarding the Tentative Parcel Map may be submitted in writing at any time prior to the hearing or orally at the scheduled hearing listed above or as may be continued to a later date. If you challenge the above application in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence delivered to the Zoning Administrator at, or prior to the public hearing.

For information, please contact Senior Planner Rowland Hickel, Butte County Development Services Department, Planning Division at (530) 552-3684 or rhickel@buttecounty.net.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in the hearing, please contact us at (530) 552-3662. Notification at least 72 hours prior to the hearing will enable staff to make reasonable arrangements.

BUTTE COUNTY ZONING ADMINISTRATOR PAULA DANELUK, DIRECTOR OF DEVELOPMENT SERVICES

INITIAL STUDY AND ENVIRONMENTAL REVIEW CHECKLIST

California Environmental Quality Act (CEQA)

PROJECT INFORMATION

1. Project Title: Carole Kelly Lotti Tentative Parcel Map (TPM18-0006)

2. Lead Agency Name and Address: Butte County – Department of Development Services

Planning Division 7 County Center Drive Oroville, CA 95965

3. Contact Person and Phone Number: Rowland Hickel, Senior Planner

530.552.3684

rhickel@buttecounty.net

4. Project Location: The project site encompasses 40.59 acres located at 6000 Cohasset

Road, 1,000 feet south from the intersection of Cohasset Road and Keefer Road, and 1.5 miles north of the City of Chico. Township 23N,

Range 1E, Section 23; MDB&M. APN: 047-230-060.

5. Project Sponsor's Name and Address: Carole Kelly Lotti

9286 Goodspeed Street, Apt # F

Durham, CA 95938

6. General Plan Designation: Foothill Residential (FR)

7. Zoning: FR-20/ALUC/DH (Foothill Residential – 20-acre minimum/Airport

Compatibility Zone/Deer Herd Migration)

8. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

Tentative Parcel Map to subdivide a 40.59 acre property situated in the FR-20/ALUC/DH (Foothill Residential – 20-acre minimum/Airport Compatibility Zone/Deer Herd Migration) zone into two parcels of 20.00 acres (Parcel 1) and 20.59 acres (Parcel 2). Wastewater disposal for each parcel would be provided by an on-site individual septic system. Domestic water for each parcel would be provided by a well. Access to both parcels is provided by Grindstone Place, a private road, which is located off Cohasset Road, a County road. A 40-foot access and utility easement is proposed through Parcel 1 to provide access and utilities to Parcel 2. An additional 20-foot utility easement is proposed between Cohasset Road and Parcel 2.

9. Surrounding Land Uses and Setting: (Briefly describe the project's surroundings)

The project area primarily consists of ranchettes that range in size from 5 to 40 acres. Ranchettes include single-family residential and agricultural uses. Agricultural uses primarily consists of animal grazing. Cohasset Road, a County-maintained road borders the western property line, and is the primary access to Grindstone Place, a private road, and the project site. Indian Cliffs Drive, a private road, borders the south property line.

Ascent Environmental

Direction	General Plan Designation	Zoning	Existing Land Use(s)
North	Foothill Residential	FR-20	Single-Family Residential
South	Foothill Residential	FR-20	Agriculture (Dryland Pasture)
East	Foothill Residential	FR-40	Single-Family Residential
West	Rural Residential	RR-5	Single-Family Residential

The project site is developed with a single-family residence and accessory structures located on Parcel 1. There is an existing gated driveway from Grindstone Place to the residence. Parcel 2 is undeveloped. Domestic water and sewer services are provided by a groundwater well and individual, onsite septic system.

The project site is zoned FR-20/ALUC/DH (Foothill Residential – 20-acre minimum/Airport Compatibility Zone/Deer Herd Migration). The purpose of the FR zone is to allow for the appropriate development of large-lot single-family home, small farmsteads, and related uses in the foothill areas of the county. Permitted uses and development standards for the FR zone are intended to ensure that the development of homes are sensitive to the foothill setting. Permitted residential uses in the FR zones include a single-family home, small residential care home, and an accessory dwelling unit. The FR zone also conditionally permits non-residential uses compatible with a low-density rural setting, including public and quasi-public uses, mining, animal services, hunting and fishing clubs, nurseries, and commercial stables. Animal grazing, crop cultivation, private stables, on-site agricultural product sales, and other similar agricultural activities are permitted uses in the FR zone. The minimum permitted parcel size in the FR zone ranges from one (1) acre to forty (40) acres. The project site is zoned for a parcel size of twenty (20) acres.

Blue Oak-Foothill Pine is the dominant vegetation community within the project site. Common species observed within the site were blue oak (*Quercus douglasii*), foothill pine (*Pinus sabiniana*) and a few live oak (*Quercus wislizeni*) with an understory ranging from patches of dense buckbrush (*Ceanothus cuneatus*) to an herbaceous dominated understory composed of annual grasses and forbs. Boulders and large cobble were prevalent within the understory. Some other species observed were foothill honeysuckle (*Lonicera interrupta*) and poison oak (*Toxicodendron diversilobum*).

- 10. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)
 - Butte County Department Development Services: Building Permits (Future Construction)
 - Butte County Environmental Health Department: Wastewater Disposal Permits (Future Construction)
- 11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

See Discussion 1.18

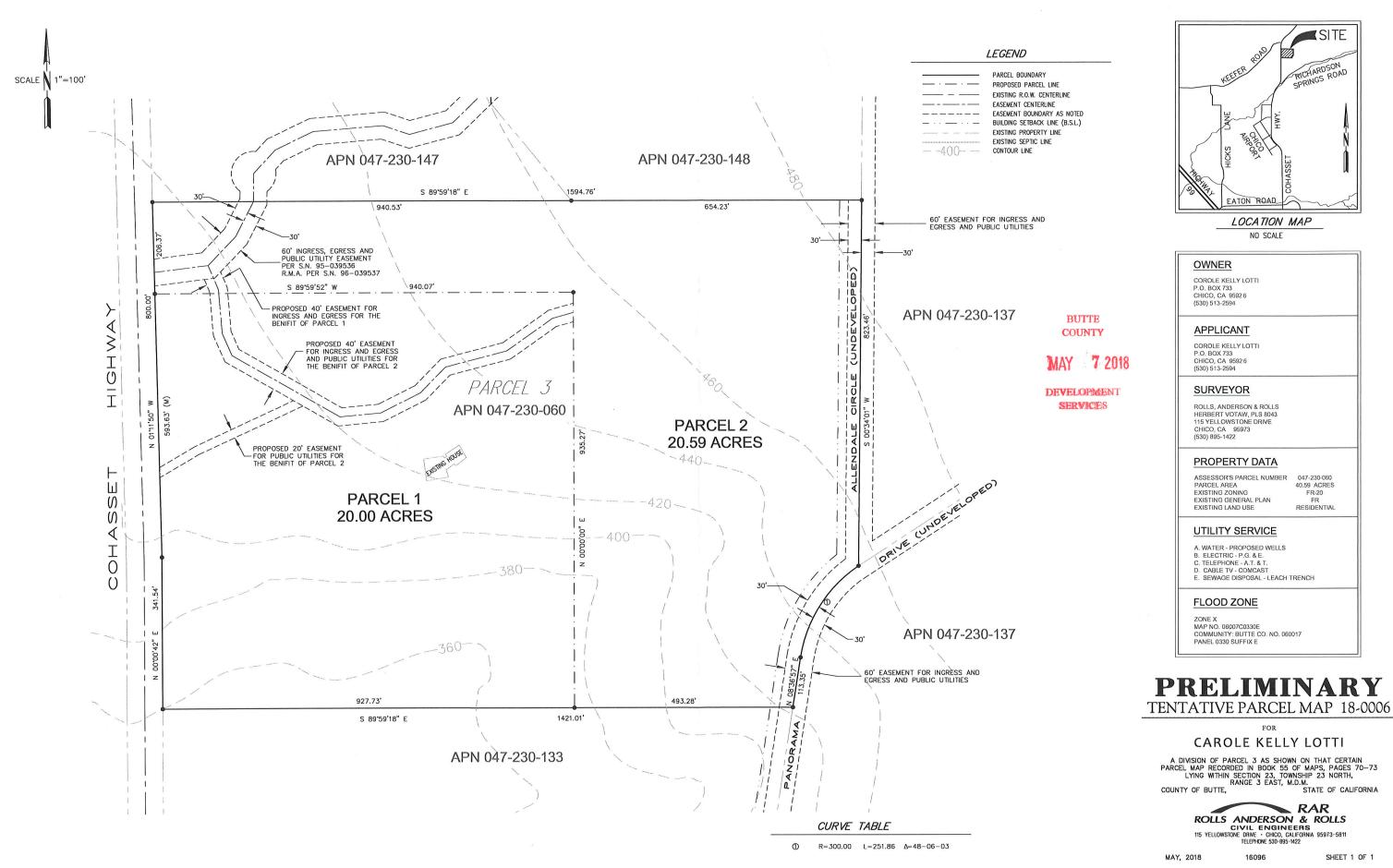
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Where checked below, the topic with a potentially significant impact will be addressed in an environmental impact report.

Aesthetics	\boxtimes	Agriculture and Forest Resources	\boxtimes	Air Quality
Biological Resources	\boxtimes	Cultural Resources		Energy
Geology / Soils	\boxtimes	Greenhouse Gas Emissions		Hazards / Hazardous Materials
Hydrology / Water Quality		Land Use / Planning		Mineral Resources
Noise		Population / Housing		Public Services
Recreation		Transportation		Tribal Cultural Resources
Utilities / Service Systems		Wildfire	\boxtimes	Mandatory Findings of Significance
		None		None with Mitigation Incorporated

DETERMINATION (To be completed by the Lead Agency)

	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.					
	WILL NOT be a significant effect in this case	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 will be prepared.					
	I find that the proposed project MAY have ENVIRONMENTAL IMPACT REPORT is requ	e a significant effect on the environment, and an ired.					
	unless mitigated" impact on the environm in an earlier document pursuant to applica mitigation measures based on the earlier	e a "potentially significant impact" or "potentially significant nent, but at least one effect 1) has been adequately analyzed able legal standards, and 2) has been addressed by analysis as described on attached sheets. An nired, but it must analyze only the effects that remain to be					
	all potentially significant effects (a) have b DECLARATION pursuant to applicable star	could have a significant effect on the environment, because seen analyzed adequately in an earlier EIR or NEGATIVE indards, and (b) have been avoided or mitigated pursuant to N , including revisions or mitigation measures that are ning further is required.					
Prepa	ared by Rowland Hickel, Senior Planner:	Date					
Revie	wed by:	Date					





LOCATION MAP

40.59 ACRES FR-20 FR RESIDENTIAL

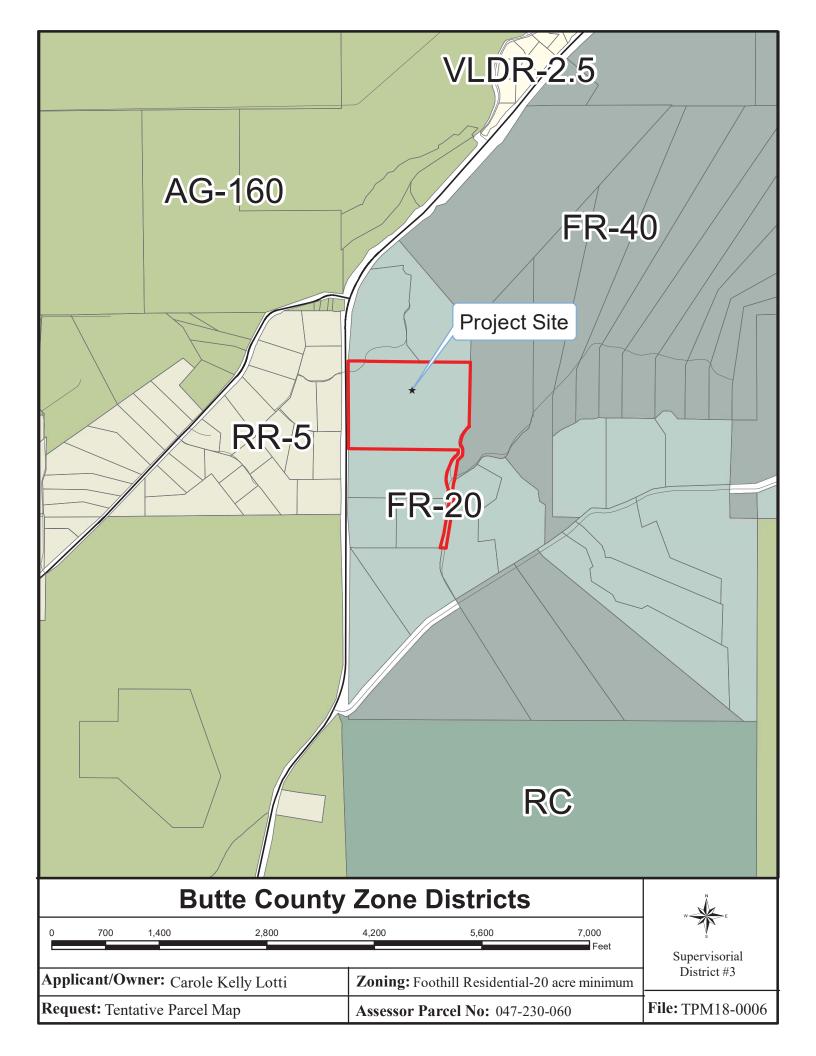
PRELIMINARY

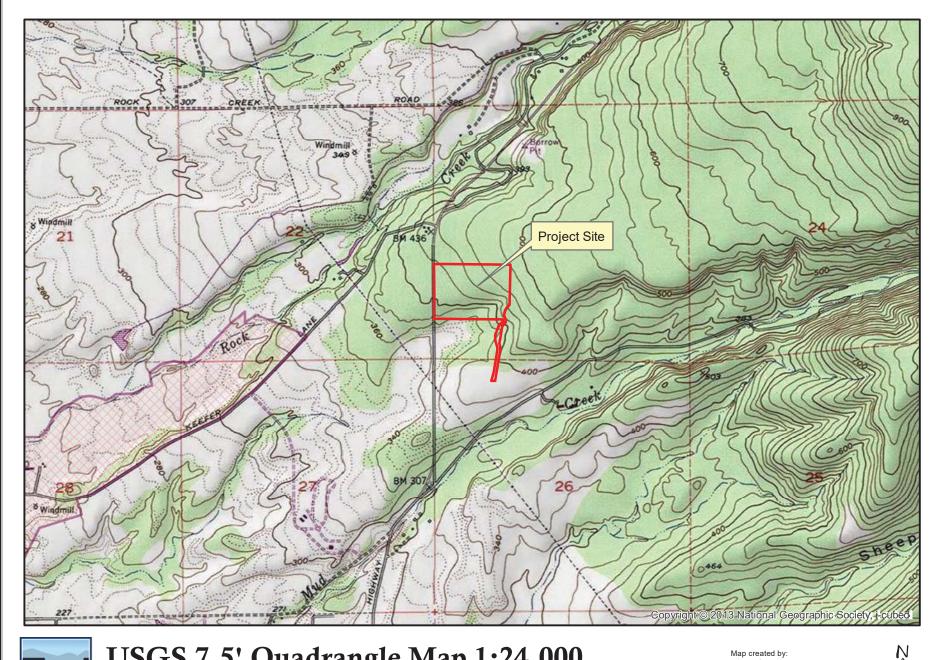
CAROLE KELLY LOTTI

A DIVISION OF PARCEL 3 AS SHOWN ON THAT CERTAIN PARCEL MAP RECORDED IN BOOK 55 OF MAPS, PAGES 70-73 LYING WITHIN SECTION 23, TOWNSHIP 23 NORTH, RANGE 3 EAST, M.D.M. STATE OF CALIFORNIA



SHEET 1 OF 1







USGS 7.5' Quadrangle Map 1:24,000

TPM18-0006 (Lotti)

Map created by:
Butte County
Development Services Department
7 County Center Drive, Oroville, Ca. 95965



EVALUATION OF ENVIRONMENTAL IMPACTS

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

1.1 AESTHETICS

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
l.	Aesthetics.				
	cept as provided in Public Resources Code section 21099 (vinificant for qualifying residential, mixed-use residential, an		•		
a)	Have a substantial adverse effect on a scenic vista?				
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
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 publicly accessible vantage points.) 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 which would adversely affect day or nighttime views in the area?				

Discussion

a) Have a substantial adverse effect on a scenic vista?

Less than significant impact. No scenic vistas have been identified in the project area. Future development on the resultant parcels may include permitted and conditionally-permitted uses allowed within the FR zoning designation. Permitted development on the resultant parcels are consistent with the existing visual characteristics of the surrounding area. Also, the proposed large parcel sizes (20-acres), as well as the visual compatibility of permitted uses with the surrounding area, will not substantially interfere with any scenic views, or otherwise, have a demonstrable negative aesthetic effect.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No impact. No scenic resources have been identified on the project site. The project site is also not located adjacent to a state-designated or county-designated scenic highway. Therefore, future development would not damage or degrade scenic resources within a state scenic highway.

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 publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than significant impact. The nearest publicly accessible area to the project site is Cohasset Road, located directly adjacent to the west property line of the project site. Permitted development include uses and densities

that are similar to the surrounding area, and would not result in negatively altering the character or visual quality of the project site and surrounding area.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant impact. No new outdoor lighting is proposed. However, outdoor lighting for safety and security could potentially be added in the future on the resultant parcels. The development of these parcels would be similar to the rural character already established in the surrounding areas. Any new outdoor lighting in residential zones are subject to *Article 14, Section 24-67 of Butte County Zoning Code*, which requires that all outdoor lighting in residential areas be located, adequately shielded, and directed such that no direct light falls outside the property perimeter, or into the public right-of-way. With the implementation of outdoor lighting regulations, the proposed project would not create new sources of substantial lighting or glare that would generate a significant impact.

1.2 AGRICULTURE AND FOREST RESOURCES

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
II.	Agriculture and Forest Resources.						
to t	n determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.						
Wc	ould the project:						
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?						
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))?						
d)	Result in the loss of forest land or conversion of forest land to non-forest use?						
e)	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?						

Regulatory Setting

Williamson Act/Land Conservation Act (LCA) Contracts

The California Land Conservation Act of 1965, commonly known as the Williamson Act, was established based on numerous State legislative findings regarding the importance of agricultural lands in an urbanizing society. Policies emanating from those findings include those that discourage premature and unnecessary conversion of agricultural land to urban uses and discourage discontinuous urban development patterns, which unnecessarily increase the costs of community services to community residents. The Williamson Act authorizes each County to establish an agricultural preserve. Land that is within the agricultural preserve is eligible to be placed under a contract between the property owner and County that would restrict the use of the land to agriculture in exchange for a tax assessment that is based on the yearly production yield. The contracts have a 9-year term that is automatically renewed each year unless the property owner or county requests a non-renewal or the contract is canceled.

Farmland Mapping and Monitoring Program

The California Farmland Mapping and Monitoring Program (FMMP) develops statistical data for analyzing impacts on California's agricultural resources. The FMMP program characterizes "Prime Farmland" as land with the best combination of physical and chemical characteristics that are able to sustain long-term production of agricultural crops. "Farmland of Statewide Importance" is characterized as land with a good combination of physical and chemical characteristics for agricultural production, but with less ability to store soil moisture than prime farmland. "Unique Farmland" is used for the production of the state's major crops on soils not qualifying as prime farmland or of statewide importance. The FMMP also identifies "Grazing Land", "Urban and Built-up Land", "Other Land", and "Water" that is not included in any other mapping category.

California Public Resources Code Section 4526

"Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.

California Public Resources Code Section 12220(g)

"Forest land" is 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.

Butte County Right to Farm Ordinance

Butte County has adopted a Right to Farm Ordinance (Butte County Code Chapter 35, Protection of Agricultural Land). This ordinance protects properly conducted agricultural operations in the unincorporated County against nuisance lawsuits and requires annual disclosure to all property owners within the County of the right to farm. In addition, the ordinance requires disclosure to buyers of real property and as part of development approvals. While the County Right-to-Farm Ordinance specifically applies to commercial agricultural operations within the unincorporated area, all commercial agricultural operations that comply with agricultural standards currently are protected from nuisance claims under State law (Section 3482.5 of the California Civil Code), whether located within cities or unincorporated areas.

Agricultural Buffer Policy

Pursuant to Policy AG-P5.3 from the General Plan 2030, Butte County has adopted Article 17 of the Butte County Zoning Ordinance which requires a 300-foot buffer between lands zoned agriculture and new residential development. This ordinance applies to parcels where residential structures are to be developed in the following areas of the county: (1) all lands zoned Agriculture; (2) in other zones within 300 feet of the boundary of Agriculture zones; (3) areas inside and within 300 feet of sphere of influence boundaries for incorporated cities, where the boundary abuts parcels zoned Agriculture; and, (4) areas within 300 feet of a Williamson Act Contract. Exceptions to the 300-foot agricultural buffer setback requirement may be requested by the project applicant through an Unusual Circumstances Review application process.

Agricultural/Residential Buffer Implementation Guidelines

The existing Butte County Zoning Ordinance requires a 300-foot buffer between agricultural and non-agricultural uses. To implement this requirement, and to provide guidance regarding requests for a determination of unusual circumstances, Butte County has prepared Agricultural/Residential Buffer Implementation Guidelines. The buffer must physically separate agricultural and nonagricultural uses and help to minimize potential conflicts. The County may make a determination of unusual circumstances based on criteria outlined in the Guidelines, in which case the buffer may take other forms or be of a lesser distance.

Residential Setback from Orchards and Vineyards in Residential Zones

The Butte County Zoning Ordinance Section 24-56.1 requires a minimum 25-foot setback to be established between new residential development and existing, active orchards and vineyards that are located in Residential zones. Proposed land divisions adjacent to an active orchard or vineyard shall be reviewed by the Agricultural

Commissioner, in consultation with the Development Services Department, to determine an appropriate setback width, which shall be publicly noticed and reviewed by the hearing body.

Discussion

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?

No impact. The California Farmland Mapping and Monitoring Program designates the project parcel as "Grazing Land", which contains land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock. Only lands categorized as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance (if adopted by the County) are designated as Important Farmland. The proposed project is not located on lands designated as Important Farmland in the Farmland Mapping and Monitoring Program, and would not result in the conversion of Important Farmland to a non-agricultural use.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

Less than significant impact. The project site is not under a Williamson Act Contract. And, there are no parcels under a Williamson Act Contract within 300 feet of the project site.

The project site and surrounding area is zoned Residential, and there are no existing agricultural activities on the surrounding parcels except for dryland pasture cattle grazing. Therefore, future residential development on the resultant parcels would not significantly conflict with agricultural zonings or uses.

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))?

No impact. The project site and surrounding area is not classified as forestland, as defined in Public Resources Code Section 12220(g), or as timberland, as defined in Public Resources Code Section 4526. The project site is not zoned or designated for forest or timber resource uses.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. The project site is located in the foothill region of Butte County and does not contain trees or timber resources classified as forestland, as defined in Public Resources Code Section 12220(g), or as timberland, as defined in Public Resources Code Section 4526. Therefore, the proposed project would not result in the loss or conversion of forest land to a non-forest use.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No impact. The project site is designated as "Grazing Land" under the California Farmland Mapping and Monitoring Program. Lands within 300 feet of the project site are designated "Grazing Land and "Other". No prime, unique or farmland of statewide importance occurs on the project site, or in the immediate vicinity of the project site. Therefore, the project would not result in the conversion of Farmland to a non-agricultural use.

1.3 AIR OUALITY

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	Air Quality.				
	ere available, the significance criteria established by the lution control district may be relied on to make the follow			ement district o	or air
Are significance criteria established by the applicable air district available to rely on for significance					
Wo	uld the project:				
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 non-attainment under an applicable federal or state ambient air quality standard?				
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?				

Environmental Setting

Butte County is located within the Sacramento Valley Air Basin (SVAB), comprising the northern half of California's 400-mile long Great Central Valley. The SVAB encompasses approximately 14,994 square miles with a largely flat valley floor (excepting the Sutter Buttes) about 200 miles long and up to 150 miles wide, bordered on its east, north and west by the Sierra Nevada, Cascade and Coast mountain ranges, respectively.

The SVAB, containing 11 counties and some two million people, is divided into two air quality planning areas based on the amount of pollutant transport from one area to the other and the level of emissions within each. Butte County is within the Northern Sacramento Valley Air Basin (NSVAB), which is composed of Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba Counties.

Emissions from the urbanized portion of the basin (Sacramento, Yolo, Solano, and Placer Counties) dominate the emission inventory for the Sacramento Valley Air Basin, and on-road motor vehicles are the primary source of emissions in the Sacramento metropolitan area. While pollutant concentrations have generally declined over the years, additional emission reductions will be needed to attain the State and national ambient air quality standards in the SVAB.

Seasonal weather patterns have a significant effect on regional and local air quality. The Sacramento Valley and Butte County have a Mediterranean climate, characterized by hot, dry summers and cool, wet winters. Winter weather is governed by cyclonic storms from the North Pacific, while summer weather is typically subject to a high pressure cell that deflects storms from the region.

In Butte County, winters are generally mild with daytime average temperatures in the low 50s°F and nighttime temperatures in the upper 30s°F. Temperatures range from an average January low of approximately 36°F to an average July high of approximately 96°F, although periodic lower and higher temperatures are common. Rainfall between

October and May averages about 26 inches but varies considerably year to year. Heavy snowfall often occurs in the northeastern mountainous portion of the County. Periodic rainstorms contrast with occasional stagnant weather and thick ground or "tule" fog in the moister, flatter parts of the valley. Winter winds generally come from the south, although north winds also occur.

Diminished air quality within Butte County largely results from local air pollution sources, transport of pollutants into the area from the south, the NSVAB topography, prevailing wind patterns, and certain inversion conditions that differ with the season. During the summer, sinking air forms a "lid" over the region, confining pollution within a shallow layer near the ground that leads to photochemical smog and visibility problems. During winter nights, air near the ground cools while the air above remains relatively warm, resulting in little air movement and localized pollution "hot spots" near emission sources. Carbon monoxide, nitrogen oxides, particulate matters and lead particulate concentrations tend to elevate during winter inversion conditions when little air movement may persist for weeks.

As a result, high levels of particulate matter (primarily fine particulates or PM2.5) and ground-level ozone are the pollutants of most concern to the NSVAB Districts. Ground-level ozone, the principal component of smog, forms when reactive organic gases (ROG) and nitrogen oxides (NOx) – together known as ozone precursor pollutants – react in strong sunlight. Ozone levels tend to be highest in Butte County during late spring through early fall, when sunlight is strong and constant, and emissions of the precursor pollutants are highest (Butte County CEQA Air Quality Handbook 2014).

Air Quality Attainment Status

Local monitoring data from the BCAQMD is used to designate areas a nonattainment, maintenance, attainment, or unclassified for the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). The four designations are further defined as follows:

Nonattainment – assigned to areas where monitored pollutant concentrations consistently violate the standard in question.

Maintenance – assigned to areas where monitored pollutant concentrations exceeded the standard in question in the past but are no longer in violation of that standard.

Attainment – assigned to areas where pollutant concentrations meet the standard in question over a designated period of time.

Unclassified – assigned to areas were data are insufficient to determine whether a pollutant is violating the standard in question.

Table 1.3-1. Federal and State Attainment Status of Butte County

POLLUTANT	STATE DESIGNATION	FEDERAL DESIGNATION
1-hour ozone	Nonattainment	-
8-hour ozone	Nonattainment	Nonattainment
Carbon monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
24-Hour PM10	Nonattainment	Attainment
24-Hour PM2.5	No Standard	Attainment
Annual PM10	Attainment	No Standard
Annual PM2.5	Nonattainment	Attainment
Source: Butte County AQMD, 201	8	

Sensitive Receptors

Sensitive receptors are frequently occupied locations where people who might be especially sensitive to air pollution are expected to live, work, or recreate. These types of receptors include residences, schools, churches, health care facilities, convalescent homes, and daycare centers. The project site is located in a rural area with residential uses on parcel sizes between 5 and 40 acres. Table 1.3-2 lists sensitive receptors that were identified in the project vicinity and the distances from the project site.

Table 1.3-2. Sensitive Receptors in the Project Vicinity

SENSITIVE RECEPTORS	DISTANCE FROM PROJECT SITE TO RECEPTOR				
Residence (189 Indian Cliff Drive)	150 feet east				
Residence (3203 Stonewall Drive)	175 feet west				
Residence (3204 Stonewall Drive)	317 feet west				
Residence (122 Indian Cliff Drive)	278 feet east				
Residence (6090 Grind Stone Place)	550 feet north				
Residence (6081 Grind Stone Place)	760 feet north				
Source: Butte County Geographical Information System/Google Earth imagery					

Butte County Air Quality Management District

The Butte County Air Quality Management District (BCAQMD) is the local agency with primary responsibility for compliance with both the federal and state standards and for ensuring that air quality conditions are maintained. They do this through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues.

Activities of the BCAQMD include the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the FCAA and CCAA.

According to the State CEQA Guidelines, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make significance determinations for potential impacts on environmental resources. BCAQMD is responsible for ensuring that state and federal ambient air quality standards are not violated within Butte County. Analysis requirements for construction and operation-related pollutant emissions are contained in BCAQMD's CEQA Air Quality Handbook: Guidelines for Assessing Air Quality and Greenhouse Gas Impacts for Projects Subject to CEQA Review. Established with these guidelines are screening criteria to determine whether or not additional modeling for criteria air pollutants is necessary for a project. The CEQA Air Quality Handbook also contains thresholds of significance for construction-related and operation-related emissions: ROG, NOx and PM10. The screening criteria listed in Table 1.3-4 were created using CalEEMod version 2013.2.2 for the given land use types. To determine if a proposed project meets the screening criteria, the size and metric for the land use type (units or square footage) should be compared with that of the proposed project. If a project is less than the applicable screening criteria, then further quantification of criteria air pollutants is not necessary, and it may be assumed that the project would have a less than significant impact on criteria air pollutants. If a project exceeds the size provided by the screening criteria for a given land use type then additional modeling and quantification of criteria air pollutants should be performed (Butte County Air Quality Management District 2014).

Table 1.3-4. Screening Criteria for Criteria Air Pollutants

LAND USE TYPE	MAXIMUM SCREENING LEVELS FOR PROJECTS			
Single-Family Residential	30 Units			
Multi-Family (Low Rise) Residential	75 Units			
Commercial	15,000 square feet			
Educational	24,000 square feet			
Industrial	59,000 square feet			
Recreational	5,500 square feet			
Retail	11,000 square feet			
Source: Butte County AQMD, CEQA Air Quality Handbook, 2014				

Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact. The applicable air quality plan for the project area is the *Northern Sacramento Valley Planning Area 2015 Triennial Air Quality Attainment Plan.* In adopting this plan, BCAQMD assumes that growth within its jurisdiction will be in accordance with city and county general plans, for which air quality effects associated with build-out have been analyzed.

A project is deemed inconsistent with an air quality plan if it would result in population or employment growth that exceeds the growth estimates in the applicable air quality plan (i.e., generating emissions not accounted for in the applicable air quality plan emissions budget). Therefore, proposed projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rate included in the applicable air quality plan.

The proposed project could result in minor population growth in the County with build-out of the resultant parcels. However, the proposed development density is consistent with the established zoning, and population growth to the area has already been anticipated for under Butte County General Plan 2030. Additionally, the total number of single-family residential units generated by the project are below the maximum screening criteria established in Table 1.3-3. Therefore, the project is not anticipated to cause significant impacts to regional air quality, or otherwise conflict with the basin's air quality management plan, provided that best management practices for the control of fugitive dust during construction activities are employed.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than significant impact with mitigation incorporated. The proposed project has the potential to impact air quality primarily in two ways: (1) the project would generate mobile source emissions (i.e., added vehicle trips, energy use) associated with future development on the resultant parcels, and (2) construction activities associated with the development of the resultant parcels would generate fugitive dust (PM10) from grading activities, construction exhaust emissions (PM10, NOx), and evaporative emissions of reactive organic gases (ROG or VOC) from paving activities and architectural coatings.

Mobile source emissions are produced from motor vehicles, and include tailpipe and evaporative emissions. Energy use associated with future development also generate emission from heating and cooling systems, lighting, applicant, water use and wastewater. No development is proposed with this project; however, future development of the resultant parcels have the potential to generate these direct and indirect emissions. Emissions generated during at build-out of the resultant parcels are not expected to be substantial, and would not significantly violate existing air quality standards, because only a limited amount of development would occur over the project site. The limited amount of development to occur with the proposed project was

compared to the screening criteria of Table 1.3-3, and deemed to have a less than significant impact to the environment.

Construction-related emissions are generally created throughout project implementation and parcel development, and would originate from construction equipment exhaust, employee vehicle exhaust, dust from grading the land, exposed soil eroded by wind, and ROGs from the architectural coating and asphalt paving. Construction-related emissions would vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions, and soil moisture content. Despite this variability in the project and project site conditions, there are a number of feasible control measures that can be reasonably implemented to reduce construction-related emissions to a less than significant level. These measures as well as other common air pollution control measures are recommended in *Appendix C of BCAQMD's CEQA Handbook (2014)* and are to be implemented as **Mitigation Measure AIR-1**, listed below.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact with mitigation incorporated. Sensitive receptors in the project area and their distances from the project site area contained Table 1.3-2. Based on the information provided in section b.), above, the proposed project would not result in the violation of any air quality standards or contribute substantially to an existing or projected air quality violation, except for potential fugitive dust emissions during construction activities. Implementation of Mitigation Measure AIR-1 would reduce potential cumulative fugitive dust emission impacts to a less than significant level.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than significant impact. Future permitted uses on the resultant parcels would not create objectionable odors. However, future construction activities could include objectionable odors from tailpipe diesel emissions and from solvents in adhesives, paints, caulking materials, and new asphalt. Since odor impacts would be temporary and limited to the area adjacent to the construction operations, and because the project site is located in a rural area of the county, odors would not impact a substantial number of people for an extended time.

Mitigation Measures

Mitigation Measure AIR-1

The following best practice measures to reduce impacts to air quality shall be incorporated by the project applicant, subject property owners, or third-party contractors during construction activities on the project site. These measures are intended to reduce criteria air pollutants that may originate from the site during the course of land clearing and other construction operations.

Diesel PM Exhaust from Construction Equipment and Commercial On-Road Vehicles Greater than 10,000 Pounds

- All on- and off-road equipment shall not idle for more than five minutes. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the five-minute idling limit.
- Idling, staging and queuing of diesel equipment within 1,000 feet of sensitive receptors is prohibited.
- All construction equipment shall be maintained in proper tune according to the manufacturer's specifications.
 Equipment must be checked by a certified mechanic and determined to be running in proper condition before the start of work.
- Install diesel particulate filters or implement other CARB-verified diesel emission control strategies.

- Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5 minutes at any location when within 100 feet of a restricted areas.
- To the extent feasible, truck trips shall be scheduled during non-peak hours to reduce perk hour emissions.

Operational TAC Emissions

- All mobile and stationary Toxic Air Contaminants (TACs) sources shall comply with applicable Airborne Toxic
 Control Measures (ATCMs) promulgated by the CARB throughout the life of the project (see
 https://ww2.arb.ca.gov/resources/documents/airborne-toxic-control-measures).
- Stationary sources shall comply with applicable District rules and regulations.

Fugitive Dust

Construction activities can generate fugitive dust that can be a nuisance to local residents and businesses near a construction site. Dust complaints could result in a violation of the District's "Nuisance" and "Fugitive Dust" Rules 200 and 205, respectively. The following is a list of measures that may be required throughout the duration of the construction activities:

- Reduce the amount of the disturbed area where possible.
- Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. An adequate water supply source must be identified. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible.
- All dirt stockpile areas should be sprayed daily as needed, covered, or a District approved alternative method will be used.
- Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities.
- Exposed ground areas that will be reworked at dates greater than one month after initial grading should be sown with a fast-germinating non-invasive grass seed and watered until vegetation is established.
- All disturbed soil areas not subject to re-vegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the Butte County Air Quality Management District.
- All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with local regulations.
- Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site.
- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.
- Post a sign in prominent location visible to the public with the telephone numbers of the contractor and the Butte County Air Quality Management District (530) 332-9400 for any questions or concerns about dust from the project.

All fugitive dust mitigation measures required should be shown on grading and building plans. In addition, the contractor or builder should designate a person or persons to monitor the dust control program and to order increased

watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend period when work may not be in progress. The name and telephone number of such persons shall be provided to the District prior to land use clearance for map recordation and finished grading of the area.

Please note that violations of District Regulations are enforceable under the provisions of California Health and Safety Code Section 42400, which provides for civil or criminal penalties of up to \$25,000 per violation.

Plan Requirements: The note shall be placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. This note shall also be placed on all building and site development plans.

Timing: Requirements of the condition shall be adhered to throughout all grading and construction periods.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Building inspectors shall spot check and shall ensure compliance on-site. Butte County Air Pollution Control District inspectors shall respond to nuisance complaints.

1.4 BIOLOGICAL RESOURCES

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV.	Biological Resources.				
Wo	ould the project:				
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 Wildlife or the U.S. Fish and Wildlife Service?				
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 the 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, 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?				
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?				

Environmental Setting

Biological Resource Assessment

Gallaway Enterprises prepared a Biological Resource Assessment (BRA) for the proposed project on January 2019. The BRA evaluated site conditions and the potential for rare and special-status species to occur in the biological survey area (BSA). The BRA included a field survey conducted within the biological survey area (BSA) on January 21, 2019. Sections of the assessment are included below. The full assessment is included in the Appendix.

Vegetation Communities

Blue Oak-Foothill Pine

Blue Oak-Foothill Pine is the dominant vegetation community within the BSA. Common species observed within the BSA were blue oak (*Quercus douglasii*), foothill pine (*Pinus sabiniana*) and a few live oaks (*Quercus wislizeni*) with an understory ranging from patches of dense buckbrush (*Ceanothus cuneatus*) to an herbaceous dominated understory composed of annual grasses and forbs. Boulders and large cobble were prevalent within the understory. Some other species observed were foothill honeysuckle (*Lonicera interrupta*) and poison oak (*Toxicodendron diversilobum*). The Blue Oak-Foothill Pine habitat type provides foraging ground for a variety of wildlife species and breeding habitat for reptiles and mammals including bats and nesting birds.

Annual Grassland

Annual grassland occurs in between the blue oak-foothill pine habitat within the BSA. Boulders and large cobble were found scattered throughout much of the annual grassland habitat. The annual grassland within the BSA consist mostly of annual grasses and forbs, such as yellow-star thistle (*Centaurea solstitialis*), medusahead (*Elymus caput-medusae*), soft chess (*Bromus hordeaceus*), Italian ryegrass (*Festuca perennis*), long-beaked stork's-bill (*Erodium botrys*), wild oats (*Avena* spp.), and a variety of clovers (*Trifolium* spp.). Wildlife species use grassland habitat for foraging but often require some other habitat characteristics such as rocky outcrops, cliffs, mammal burrows, caves, or ponds to breed and find shelter for escapement. Common species that are found breeding in this habitat include a variety of groundnesting avian species and small mammals.

Wetlands

Scattered within the BSA are numerous seasonal and vernal wetlands and swales. Seasonal wetlands are non-tidal depressional wetlands classified under the palustrine system. They tend to stay wet or ponded into late spring or early summer months and are typically dominated by generalist wetland plants and emergent wetland plants. Vernal pools are similar depressional features that are formed where a shallow hardpan prevents water from draining down through the soil. Vernal pools are typically dominated by vernal pool endemic plant species and tend to dry down sooner than seasonal wetlands. Swales are low drainage pathways that typically connect to and help feed wetland or other water features. Aquatic wildlife species typically found in wetlands include a variety of invertebrates and amphibians.

Riverine

Riverine habitat is distinguished by intermittent or continually running water. There are a few ephemeral drainages present within the BSA. Ephemeral drainages do not convey water year-round. They dry up seasonally and play an important role in conveying and filtering seasonal runoff into larger perennial riverine systems. The drainages present within the BSA contained mud or gravel bottoms.

Barren

Barren habitat is typified by non-vegetated soil, rock, and gravel. Only a small percentage of the BSA contains barren habitat. There is one paved/gravel road within the BSA and a few unpaved, dirt roads throughout the BSA that are functional for transportation. The barren habitat type provides low quality habitat to wildlife.

Endangered, Threatened and Rare Plants

The BSA contains suitable habitat for special-status plant species including Butte County checkerbloom and Red Bluff dwarf rush

Butte County Checkerbloom

Butte County checkerbloom is ranked as a 1B.2 plant under the CNPS. Butte County checkerbloom is a rhizomatous plant with basal leaves and a tall flower raceme that produces pink flowers from April through June. Butte County checkerbloom occurs in the understory of oak woodlands and brushy slopes in and around rocky outcroppings and along ephemeral drainages and draws in the foothills of Butte County, particularly on the Tuscan Formation. Current threats to this species include loss of habitat due to residential development and fire suppression activities.

Red Bluff Dwarf Rush

Red Bluff dwarf rush is ranked as a 1B.1 plant under the CNPS. It is endemic to California and only occurs in the northern portion of the Central Valley and the Sierra Nevada foothills. Red Bluff dwarf rush is a small annual, grass-like herb that

blooms from March through May. It can be found within vernal pools and other moist, or mesic, areas with similar vernal hydrology. Current threats facing Red Bluff dwarf rush are loss of habitat, changes in hydrology and invasive species.

Endangered, Threatened and Special Status Wildlife

Suitable habitat was identified for federally listed vernal pool fairy shrimp, state species of special concern pallid bat, and avian species that are protected under the Migratory Bird Treaty Act (MBTA).

Vernal Pool Fairy Shrimp

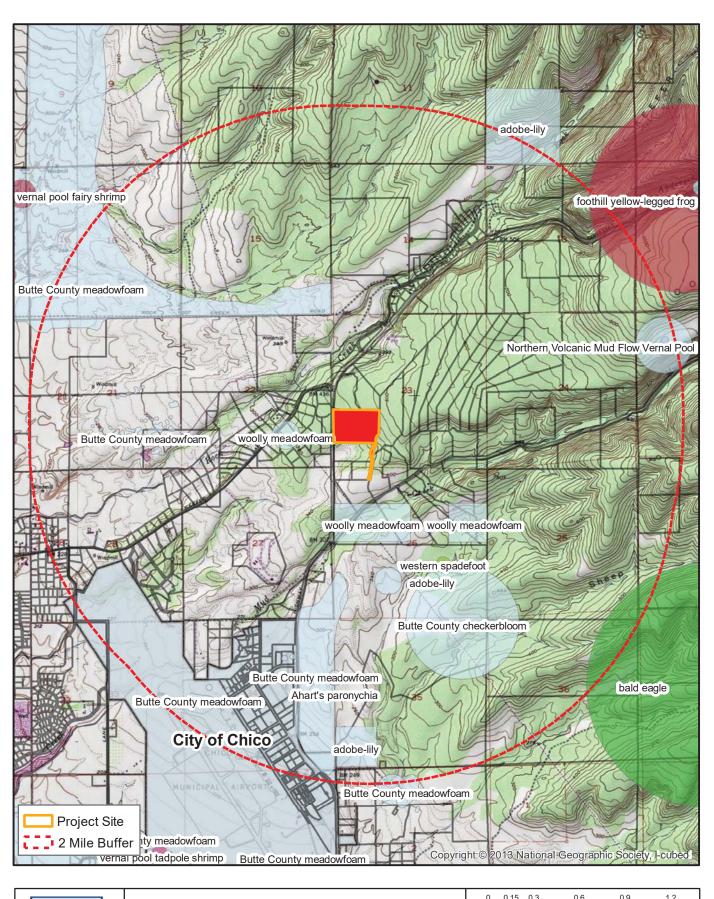
Vernal pool fairy shrimp are listed under the ESA as threatened. They are widespread but not abundant. Known populations occur in California to southern Oregon. The geographic range of this species encompasses most of the Central Valley from Shasta County to Tulare County and the central coast range from northern Solano County to Santa Barbra County, California: additional disjunctive occurrences have been identified in western Riverside County, California, and Jackson County, Oregon, near the city of Medford. The vernal pool fairy shrimp occupies a variety of different vernal pool habitats, from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. Occupied habitats range in size from rock outcrops pools as small as one square meter to large vernal pools up to 12 acres. Smaller vernal pools are the most commonly occupied and are found more frequently in grass or mud bottomed swales, or basalt flow depression pools in unplowed grasslands.

Pallid Bat

Pallid bats are designated as a CDFW SSC. Pallid bats roost alone, in small groups (2 to 20 bats), or gregariously (100s of individuals). Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating Ponderosa pine and valley oak bark, deciduous trees in riparian areas, and fruit trees in orchards), and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings. Roosts generally have unobstructed entrances/exits and are high above the ground, warm, and inaccessible to terrestrial predators. However, this species has also been found roosting on or near the ground under burlap sacks, stone piles, rags, and baseboards. Lewis 1996 found that pallid bats have low roost fidelity and both pregnant and lactating pallid bats changed roosts an average of once every 1.4 days throughout the summer. Overwintering roosts have relatively cool, stable temperatures and are located in protected structures beneath the forest canopy or on the ground, out of direct sunlight. In other parts of the species' range, males and females have been found hibernating alone or in small groups, wedged deeply into narrow fissures in mines, caves, and buildings. At low latitudes, outdoor winter activity has been reported at temperatures between –5 and 10 °C.

Deer Herd Wintering Migration Area

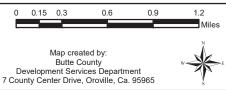
The project site is located on the western edge of a designated migratory deer herd winter range for the East Tehama deer herd under Butte County General Plan 2030. East Tehama migratory deer herds migrate from higher elevations in East Butte County and Lassen County to lower elevation winter range areas in Butte County. Before the winter snows arrive, the deer generally reach the lower foothill habitats dominated by blue oak, foothill pine, and chaparral stands. This is where they will winter and breed and move from in the following spring to complete the yearly cycle. There are some portions of this winter range in Butte County that are considered to be critical winter range areas, which include habitat that is critical to the survival of the migratory deer herds during severe winter conditions. The non-critical and/or winter areas provide habitat that is suitable for winter conditions, but not critical during severe winter conditions.





CNNDB Occurances

TPM18-0006 (Carole Kelly Lotti)



Discussion

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 Wildlife or the U.S. Fish and Wildlife Service?

Less than significant impact with mitigation incorporated. The biological resource assessment (BRA) identified suitable habitat for special–status plant species including Butte County checkerbloom and Red Bluff dwarf rush. Suitable habitat was also identified for federally-listed vernal pool fairy shrimp, pallid bat, and avian species protected under the Migratory Bird Treaty Act (MBTA). Suitable nesting habitat for MBTA species includes annual grassland habitat, trees, and shrubs; however, within the eastern portion of the project site, there is a high level of disturbance due to horse grazing, which limits the potential for ground-nesting avian species.

To avoid potential impacts to special-status plant and invertebrate species, **Mitigation Measure BIO-1** requires a pre-construction protocol-level survey during the appropriate survey window for Butte County checkerbloom, Red Bluff dwarf rush, and Vernal pool fairy shrimp. In the event one of these species is found to be located on the project site, the known populations in the project area will be included in the engineering drawings and all construction activities will be conducted to avoid the populations. Complete avoidance will be achieved by establishing and maintaining a 100-foot buffer for plant species, and a 250-foot buffer for wetland species. Additionally, before the start of construction activities within the project area, exclusionary fencing would be erected around the buffer zones to further protect and avoid the populations.

To protect Pallid bats that may be roosting within the project site, **Mitigation Measure BIO-2** is recommended. This measure would restrict the cutting down and removal of mature trees between September 16 and March 15, which is outside of the bat maternity season. And, to ensure that all trees are removed at dusk to minimize impacts to roosting bats.

Both parcels also contain suitable habitat for several avian species protected under the MBTA. To avoid potential impacts to avian species protected under the MBTA and California Fish and Game Code (CFGC), **Mitigation Measure BIO-3** is recommended before construction on Parcel 1 and Parcel 2. Adherence to recommended mitigation measures would reduce potential impacts to a less than significant level.

- 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 the U.S. Fish and Wildlife Service?
 - No impact. The project site is not identified as containing a Sensitive Natural Community (SNC).
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
 - Less than significant impact with mitigation incorporated. The biological resource assessment (BRA) identified multiple potential jurisdictional wetlands within the project site, including vernal pools, seasonal wetlands, and swales. Additionally, ephemeral drainages were also observed on the project site. No formal delineation of jurisdictional waters was performed for the project site outside the assessment performed in the BRA.

Future disturbances on the resultant parcels may cause potentially significant impacts to wetland resources if fill materials are discharged into the resource, which would violate the Clean Water Act. If impacts occur, the Army Corps of Engineers (Corps) or another State agency may issue either individual permits on a case-by-case basis or general permits on a program level. General permits are pre-authorized and are issued to cover similar activities that are expected to cause only minimal adverse environmental effects. Nationwide permits are general permits issued to cover particular fill activities. All nationwide permits have general conditions that

must be met for the permits to apply to a particular project, as well as specific conditions that apply to each nationwide permit. **Mitigation Measure BIO-5** would ensure that before disturbances on the resultant parcels that the full extent of wetland resources and ephemeral drainages are mapped by a qualified biologist. The measure includes provisions to add appropriate buffers to avoid potential impacts; however, if impacts cannot be avoided, the measure also includes provisions for the project proponent to obtain permits from the appropriate regulatory agencies.

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?

Less than significant impact. Wildlife movement corridors are routes frequently utilized by wildlife that provide shelter and sufficient food supplies to support wildlife species during migration. Movement corridors generally consist of riparian, woodlands, or forested habitats that span contiguous acres of undisturbed habitat. Wildlife movement corridors are an important element of resident species home ranges, including deer and coyote.

The project site is located within a Butte County migratory deer herd wintering area for the East Tehama deer herd. The East Tehama deer herd migrate from higher elevations in East Butte County and Lassen County to the lower elevation winter range area in Butte County. There are some portions of this winter range in Butte County that are considered to be critical winter range areas, which include habitat that is critical to the survival of the migratory deer herds during severe winter conditions. The non-critical and/or winter areas designated on the project site provide habitat that is suitable for winter conditions, but not critical during severe winter conditions.

Butte County Code section 24-37 identifies wintering and critical sensitive habitat areas for migratory deer while continuing to allow development and the reasonable use of the land within these areas. Under section 24-37, minimum parcel size restrictions have been established for both winter and critical wintering ranges. Winter areas must maintain a minimum parcel size of twenty (20) acres, with critical winter areas maintaining a minimum parcel size of forty (40) acres. Fencing standards in migratory deer herd wintering areas are also established under this section. Fencing is limited to a maximum height of forty-eight (48) inches with the distance between the ground and bottom strand or board of the fence to be no less than sixteen (16) inches. The fence shall be constructed from a smooth wire, barbed wire, wood, or similar materials that will not be harmful to deer. These fence restrictions do not apply to fences around home site designed to exclude wildlife from gardens or landscaping, fences or corral used for livestock, and fencing necessary to secure domestic animals and private kennels or enclosures for securing dogs.

The proposed project meets the minimum parcel size restrictions established under the Butte County Code, and therefore, would not result in a development pattern that would significantly disrupt migratory deer movement. Further, an informational note reflecting the fencing restrictions established in Butte County Code section 24-37 will be added to the recorded parcel map, as a condition of project approval.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than significant impact with mitigation incorporated. The project site contains oak woodland habitat. Oak woodlands are a common habitat locally and regionally and are not considered by the California Department of Fish and Wildlife as a sensitive natural community; however, native oak trees and woodland habitats are declining statewide because of development and land management practices. As such, Butte County General Plan 2030 states that oak woodland habitat should be considered sensitive because it provides an important habitat for local and residential wildlife, and because oak woodlands are limited in extent compared with its historic distribution.

According to the CEQA Guidelines, Public Resources Code section 21083.4, the lead agency is required to determine whether a project, within its jurisdiction, may result in a conversion of oak woodlands that will have

a significant effect on the environment. If a County determines that there may be a significant impact on oak woodlands, the County must require mitigation to avoid or reduce impacts to these resources. Mitigation includes conservation through the use of conservation easements; planting and maintaining an appropriate number of replacement trees; the contribution of funds to the Oak Woodlands Conservation Fund to purchase oak woodlands conservation easements; and/or other mitigation measures developed by the County.

Although no oak trees are anticipated to be removed to complete the project, oaks trees may be removed to facilitate the development of future residential uses and structures. For this reason, **Mitigation Measure BIO-4** is recommended to reduce potentially significant impacts to oak woodlands by future development.

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?

No impact. The Butte Regional Conservation Plan (BRCP) is a joint Habitat Conservation Plan (HCP)/National Community Conservation Plan (NCCP) that is currently being prepared for the western half of the Butte County. In the event the BRCP is adopted, individual projects and development that occur in the BRCP planning area would need to be coordinated with the Butte County Association of Governments to ensure that the project does not conflict with the BRCP. As the plan has not been adopted, the proposed project will not conflict, nor interfere with, the attainment of the goals of the proposed plan.

Mitigation Measures

Mitigation Measure BIO-1

Pre-construction protocol-level surveys shall be conducted during the appropriate survey window for the following species: *Butte County checkerbloom, Red Bluff dwarf rush*, and *Vernal pool fairy shrimp*. If any sensitive species will be impacted, as determined by a qualified biologist, the project either will be redesigned to avoid the population(s) to the maximum extent practicable or the species will be mitigated by the purchase of credits at an agency approved mitigation bank or other mitigation. For those populations to be fully avoided, the following measures shall be implemented:

- During the planning stages of the project, the known populations in the project area will be included in the engineering drawings and all construction activities will be conducted to avoid the populations. Complete avoidance will be achieved by establishing and maintaining a 100-foot buffer for plant species, and 250-foot buffer for wetland species, and preventing any changes to on-site drainage patterns that could de-water or introduce water to known populations. However, a smaller buffer may be used if detailed topographic information shows that the local hydrology drains away from the wetlands and plants in question.
- 2. Prior to the start of construction activities within the project area, exclusionary fencing shall be erected around the buffer zones of the populations that will be completely avoided. If necessary, a qualified botanist shall be present to assist with locating known populations. The exclusionary fencing shall be periodically inspected throughout each period of construction and be repaired as necessary. All pedestrian and vehicular entry into the completely avoided areas delineated by the fencing shall be prohibited during construction.

If complete avoidance of a population of the federally, state or CNPS ranked species is not feasible, then a species-specific determination will be made by CDFW for state only listed species and by CDFW and USFWS for jointly listed species and the County and CDFW for CNPS ranked species as to the appropriate mitigation measures to be employed. These measures will likely include habitat preservation at a ratio of 2:1 (mitigation area to impacted area). Note that preservation requirements are not additive for each species present (i.e., an area occupied by one listed-plant species requires that same amount of habitat preservation as an equivalent area occupied by two or more listed plant species). Before impacting a state-listed species, the project

proponent will need to obtain an incidental take permit pursuant to California Fish and Game Code Section 2081(b). For jointly listed plant species CDFW may issue a consistency determination pursuant to Fish and Game Code Section 2080.1 provided that the terms of the federal biological opinion and/or incidental take statement will minimize and fully mitigate the impacts of the taking. Restoration and protection of habitat shall be the focus of mitigation efforts for impacts to listed species; however, measures may also include salvaging the seeds of the plants with subsequent replanting in nearby suitable habitat. A detailed restoration and monitoring plan will be developed by a qualified botanist and will contain, at a minimum, the following information:

- 1. Location of areas on- or off-site to restore plant populations.
- 2. A description of the propagation and planting techniques to be employed in the restoration effort.
- 3. A timetable for implementation of the restoration plan.
- 4. A monitoring plan and performance criteria.
- 5. A description of remedial measures to be performed if initial restoration measures are unsuccessful in meeting the performance criteria.
- 6. A description of site maintenance activities to occur after restoration activities (e.g., weed control, irrigation, and control of herbivory by livestock and wildlife).

Plan Requirements: The mitigation shall be placed on a separate document that is to be recorded concurrently with the map or on an additional map sheet.

Timing: Requirements of the condition shall be adhered to before construction activities, and throughout all grading and construction periods.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Department of Development Services shall ensure the measure is met at the time of development and during construction activities.

Mitigation Measure BIO-2

To minimize impacts to bat species protected by the California Fish and Game Code (CFGC), the following are recommended avoidance and minimization measures:

• If mature trees are removed and/or fallen, activities should be conducted between September 16 and March 15, outside of the bat maternity seasons. Trees shall also be removed at dusk to minimize impacts to roosting bats.

Plan Requirements: The mitigation shall be recorded on an additional map sheet to the Parcel Map, and noted on future development and grading plans.

Timing: Requirements of the condition shall be adhered to prior and throughout all grading and construction periods.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is recorded on an additional map sheet of the Parcel Map, and noted on future development and grading plans. Department of Development Services shall ensure the condition is met at the time of development and during construction activities.

Mitigation Measure BIO-3

If project construction activities, including ground disturbance or vegetation removal, occur during the nesting season for birds protected under the Migratory Bird Treaty Act (MBTA) and California Department Fish & Game Code (CDFC) (approximately February 1 – August 31), the project proponent shall retain a qualified biologist to

perform preconstruction surveys for nesting bird species. Surveys to identify active bird nests shall be conducted within and 250 feet around the footprint of the proposed construction site. The survey shall be conducted within 7 days prior to the initiation of construction activities. If an active nest is observed, a species protection buffer shall be established. The species protection buffer will be defined by the qualified biologist based on the species, nest type and tolerance to disturbance. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored by a qualified biologist once per week and a report submitted to the Butte County Department of Development Services.

Plan Requirements: Perform protocol-level surveys for migratory birds protected by the California Department Fish & Game Code and the Migratory Bird Treaty Act. This measure shall be recorded on an additional map sheet to the Parcel Map.

Timing: Requirements of the condition shall be adhered to prior to and during construction activities planned to occur during nesting seasons for CDFC and MBTA species (between February 1 and August 31).

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is recorded as an additional map sheet of the Parcel Map. Department of Development Services shall ensure the condition is met at the time of construction activities.

Mitigation Measure BIO-4

Place the following note to be recorded on an additional map page of the Parcel Map that states:

Prior to any development activity or the issuance of any permit or approval removing or encroaching upon oak trees on the project site (this generally includes the canopy drip-line of trees within the area of ground disturbance and trees subject to changes in hydrologic regime), the applicant/developer shall complete one of the following measures to the satisfaction of the Director of Development Services or his/her designee:

- A. An Oak Tree Evaluation Plan shall be prepared by a qualified professional having experience in California Oak Woodlands and is either a certified arborist, qualified wildlife biologist or registered professional forester shall be submitted for review and approval by the Director of Development Services or his/her designee that includes the following:
 - 1) A survey showing the location of oak trees 5 inches or more in diameter at breast height, as defined by PRC §21083.4(a);
 - The removal of all oak trees 5 inches or more in diameter at breast height shall be mitigated. It shall be mitigated by one or more of the following: replanting and maintaining oak trees, establishing conservation easements, contributing funds for off-site oak woodlands conservation, and/or other mitigation measures developed by Butte County. Replanting oak trees cannot account for more than one-half of the mitigation. Replanted oak trees shall be maintained for seven years after they are planted. If any of the replanted oak trees die or become diseased, they shall be replaced and maintained for seven years after the new oak trees are planted;
 - A replanting schedule and diagram for trees removed or encroached upon by permit activities consistent with PRC §21083.4(b)(2), applicable mitigation measures, and Butte County Ordinance, if any, shall be submitted to and approved by the Director of Development Services or his/her designee. Replanted trees shall be planted in areas deemed appropriate by the Plan, considering future lot development, interference with foundations, fencing, roadways, driveways, and utilities. Trees planted shall be protected from livestock and other animals;
 - 4) Oak Tree protection measures for trees to be retained within the project site shall be included in construction specifications. Prior to construction or surface disturbance, a protective fence or brightly colored staked boundary shall be placed 5 feet beyond the established critical rooting zone (CRZ) of the oak or group of oaks being protected. A warning sign shall be

prominently displayed on each fence. The sign should be a minimum of 16 x 24 inches, brightly colored and be visible, even from vehicles. The sign must indicate that the CRZ is a restricted area. Orange safety triangles may suffice if other signage cannot be constructed. A high visibility plastic mesh fence is recommended to maximize the visibility of protected tree areas. Wire with bright-colored flags placed at equal intervals can also be a suitable barrier so long as it maintains high visibility. Protective fencing shall remain in place until final inspection by the qualified professional. No vegetation removal, soil disturbance, or other development activities shall occur within the tree zone to protect root systems and minimize compaction of the soil, unless authorized by Oak Tree Mitigation Plan; and

- 5) Conservation easements or funds for off-site oak woodlands conservation shall be proposed to and approved by the Director of Development Services or his/her designee; or
- B. Provide proof of compliance with the adopted Butte County Oak Woodland Mitigation Ordinance currently under preparation; or
- C. Provide proof of compliance with all required avoidance and minimization measures, and payment of all applicable fees to mitigate for blue oak woodland impacts as provided in the Butte Regional Conservation Plan, as adopted by Butte County.

Plan Requirements: No vegetation removal, grading, road construction, or other earthwork resulting in the removal or encroachment upon oak trees on the project site shall be permitted until the mitigation measure is satisfied by the applicant/developer completing one of the specified measures to the satisfaction of the Director of Development Services or his/her designee.

Timing: Requirements of the condition shall be satisfied prior to any development activity or the issuance of any grading, building, septic, or well permit, or the approval of any improvement plans on the parcels.

Monitoring: The Butte County Department of Development Services and Department of Public Works shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. At the time of septic, well, or building permit application, the Development Services Department will reference this requirement on any grading, building, septic, or well permit site plans and verify that an Oak Tree Mitigation Plan has been submitted to and approved by the Director of Development Services or his/her designee. Butte County building inspectors shall ensure compliance on-site.

Mitigation Measure BIO-5

Place the following note to be recorded on an additional map page of the Parcel Map that states:

Before any development activity or the issuance of any permit or approval that would result in ground disturbing activity, wetland features including drainage channels within the project site shall be mapped utilizing approved methodologies to determine the nature and extent of each feature. A minimum 50-foot development avoidance 'No Disturbance' buffer shall be established around the outer edge of on-site wetland features unless a larger buffer area is required due to the presence of federally, state or CNPS ranked species. Wetland features and the development avoidance buffer area shall be mapped in the engineering drawings of development plans. If future construction activities on the resultant parcels would affect the identified wetland features or buffer area, the project proponent shall either obtain appropriate permits from federal and State agencies, pursuant to Section 404 of the Clean Water Act, or obtain a letter from the agencies that states the areas of disturbance is in compliance with the applicable regulations.

Mitigation requirements for the fill of waters of the U.S. will be implemented through an onsite restoration plan, and/or an In Lieu Fund and/or a certified conservation bank with a Service Area that covers the proposed Project area. These agreements, certifications, and permits may be contingent upon successful completion of the CEQA process.

Plan Requirements: Wetland features, including drainage channels, shall be surveyed by a qualified biologist. A minimum 50-foot development avoidance buffer area shall be established around the wetland feature. This mitigation shall be noted on a separate document recorded concurrently with the parcel map.

Timing: Requirements of the condition shall be satisfied before any development activity or the issuance of any grading, building, septic, or well permit, or the approval of any improvement plans on the parcels.

Monitoring: The Butte County Department of Development Services and Department of Public Works shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Department of Development Services shall ensure the condition is met at the time of development and during construction activities.

1.5 CULTURAL RESOURCES

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V.	Cultural Resources.				
Wo	ould the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?				

Environmental Setting

An archaeological survey was prepared for the project by Gallaway Enterprises in June 2019. The survey included a pedestrian survey, consultation, and a Native American sacred lands file search, and archival research. Archival research consisted of a record search at the Northeast Information Center (NEIC); a review of historic maps, General Land Office patents, the National Register of Historic Places, California Historical Landmark Listing, and California Points of Historic Interest. The Native American Heritage Commission was informed of the project and returned a finding of no previously recorded cultural resources in the project area of potential effects (APE). The pedestrian survey was performed over the entire project site to identify previously unrecorded cultural resources or historic properties. The pedestrian survey resulted in a finding of two cultural resources. One of the cultural resources (GE-19006) is recommended for eligible for the National Register of Historic Places. The report also notes that the project site is considered extremely sensitive for cultural resources.

GE-19005

Consists of the historic rock wall. The rock wall was first noted by Jensen and Associates in 1992, however, a record is not on file with the NEIC. Since the record is not on file, a new record form was created for this report. The rock wall runs along the entire western border of the project site and consists of stacked basalt boulders. Jensen states the portion of the wall that falls within the project site has several breaks to create access to the property.

At the time of this survey, one break in the rock wall was observed, at the gravel drive. An additional rock wall appears to have been created to run along the drive and match the historic portion of the wall. The rock wall measures 3.5 feet in height by 3-4 feet in width. A survey around the rock wall failed to identify additional cultural resources.

GE-19006

Consists of a bedrock mortar outcrop. The site is a prehistoric site and consists of a rock outcropping measuring 50 x 50 feet. Nine mortars were recorded at three different milling stations or concentrations. The mortars vary in size and shape and consist of conical, saucer, and oval mortars of varying depths. The rock outcropping appears to be in good condition and all mortars were covered in soil and moss except for one that contained a large rock and was cracked through the middle. The outcropping does not appear to have been impacted by the residential development of the site.

A drainage channel occurs along the south/southeast of the bedrock milling feature, and the feature sits on a bluff overlooking the drainage and lower elevations. An intensive pedestrian survey of the area surrounding the bedrock milling station failed to identify any additional cultural resources.

Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less than significant impact with mitigation incorporated. Based on the archaeological report prepared for the project, Site GE19-0005 is not recommended for inclusion in the California Register of Historic Resources or the National Register of Historic Places. The archaeologist indicated the rock wall was representative of historic era activities in the region but did not retain information or research values sufficient to conclude that it would qualify for inclusion, and therefore, is not a significant resource under CEQA Guidelines. The report also noted that the feature is not a unique, one-of-a-kind representation, and hence does not possess significant exhibition or interpretive values. The report also indicates that the wall has undergone alteration for the existing gravel approach to the project site.

The report, however, recommends that future development avoid any potential adverse effects to the rock wall (GE19-0005) including any physical alterations, damage or destruction. This can be accomplished through the design of the project to eliminate objectionable or damaging aspects (e.g., retaining rather than removing a character-defining feature, or relocating a structure outside the boundaries of an archeological site. Implementation of Mitigation Measures CUL-1 would ensure avoidance of potential impacts to any undiscovered historic resources by immediately ceasing construction activities in the event unidentified resources are revealed, and then consultation with a professional archaeologist to evaluate the find. Implementation of Mitigation Measure CUL-2 would provide the lead agency an opportunity to review the proposed development in context with the identified historical resource to ensure appropriate avoidance of the resource. And, if future development activities have the appearance of potentially impacting the resource, to seek out additional consultation with an archaeologist and the Native American Community.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than significant impact with mitigation incorporated. Site GE-19006 is eligible for inclusion in the National Register of Historic Places under Criterion D. The nature or presence of subsurface deposits have not been investigated, and due to the potential for additional analysis such as a starch grain analysis, the archaeologist noted that GE-19006 has the potential to yield information important to the prehistory of the region. Additionally, GE-19006 lies approximately a quarter mile north of the National Register listing of Mud Creek Canyon Archaeological District and may contribute to the further understanding of prehistoric occupation and history of the region.

Due to the significance of site GE-19006, it is recommended that any disturbance of the site is avoided to prevent potential adverse effects including but not limited to physical alteration, damage, or destruction of the resource. The location of future development within the resultant parcels including any future ground-disturbing activities such as grading, excavation, and site clearance are not known at this time. Therefore, specific impacts to the resource cannot be known until the design of the development is finalized. Implementation of **Mitigation Measures CUL-1 and CUL-2** would reduce impacts to archaeological resources.

The possibility exists that buried archaeological resources that may meet the criteria of a unique archaeological resource are present on the project site. If any buried resources are encountered and damaged during project implementation, the destruction of the archaeological resources would be a potentially significant impact. Implementation of **Mitigation Measure CUL-1** would reduce this impact to a less-than-significant level.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant impact with mitigation incorporated. Indications are that humans have occupied Butte County for over 10,000 years and it is not always possible to predict where human remains may occur outside of formal burials. Therefore, excavation and construction activities, regardless of depth, may yield human remains that may not be interred in marked, formal burials.

Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." Additionally, <u>Public Resources Code section 5097.98</u> has specific stop-work and notification procedures to follow if human remains are inadvertently discovered during project implementation.

The Butte County Conservation Element has established two policies that address the inadvertent discovery of human remains. COS-P16.3 requires human remains discovered during construction to be treated with dignity and respect and to fully comply with the federal Native American Graves Protection and Repatriation Act and other appropriate laws. COS-P16.4 requires work to stop if human remains are found during construction until the County Coroner has been contacted, and, if the human remains are determined to be of Native American origin, the North American Heritage Commission and most likely descendant have been consulted.

Implementation of **Mitigation Measure CUL-1** would ensure that all construction activities that inadvertently discover human remains implements state required consultation methods to determine the disposition and historical significance of any discovered human remains. **Mitigation Measure CUL-1** would reduce this impact to a less than significant level.

Mitigation Measures

Mitigation Measure CUL-1

If grading activities reveal the presence of prehistoric or historic cultural resources (i.e., artifact concentrations, including arrowheads and other stone tools or chipping debris, cans glass, etc.; structural remains; human skeletal remains) work within 50 feet of the find shall immediately cease until a qualified professional archaeologist can be consulted to evaluate the find and implement appropriate mitigation procedures. If human skeletal remains are encountered, State law requires immediate notification of the County Coroner (530.538.7404). If the County Coroner determines that the remains are in an archaeological context, the Native American Heritage Commission in Sacramento shall be notified immediately, pursuant to State Law, to arrange for Native American participation in determining the disposition of such remains. The provisions of this mitigation shall be followed during the construction of all subdivision improvements, including land clearing, road construction, utility installation, and building site development.

Plan Requirements: This note shall be placed on a separate document that is to be recorded concurrently with the map or on an additional map sheet and shall be shown on all site development and building plans.

Timing: This measure shall be implemented during all site preparation and construction activities.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Should cultural resources be discovered, the landowner shall notify the Planning Division and a professional archaeologist. The Planning Division shall coordinate with the developer and appropriate authorities to avoid damage to cultural resources and determine appropriate action. State law requires the reporting of any human remains.

Mitigation Measure CUL-2

Prior to ground disturbing activities, or prior to issuance of development permits, the project proponent shall present a final proposal identifying the location of the proposed activities to the Butte County Department of Development Services (DDS) for review and approval. The location of the proposed development activities shall not be located within 50 feet of identified archaeological resources (GE-19005 and GE-19006), which shall be verified through consultation with Butte County DDS and/or a qualified archaeologist. If activities will be within 50 feet, the project proponent shall install exclusion fencing around eligible or potentially-eligible cultural resources, and proposed activities shall be

monitored by a qualified archeologist during initial ground disturbing activities to avoid disturbance of the cultural resources. If avoidance is not possible, further archaeological testing of the resources and consultation with the Native American Community is recommended, prior to any project-related ground disturbing activities.

Plan Requirements: This note shall be placed on a separate document which is to be recorded concurrently with the map, and on an additional map sheet recorded with the map. This note shall be shown on all site development and building plans.

Timing: This measure shall be implemented prior to all ground disturbing activities and prior to the issuance of development permits.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure the note is placed on a separate document which is to be recorded concurrently with the map and on an additional map sheet. The project proponent shall notify the Department of Development Services-Planning Division and/or a professional archaeologist to ensure proposed activities will avoid damage to eligible and/or potentially-eligible cultural resources.

1.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy.				
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	t 🗆			
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than significant impact. The proposed project would consume energy primarily in two ways: (1) construction activities would consume energy through the operation of heavy off-road equipment, trucks, and worker traffic, and (2) future residential uses would cause long-term energy consumption from electricity and propane gas consumption, energy used for water conveyance, and vehicle operations to and from the project site.

Construction energy consumption would largely occur from fuel consumption by heavy equipment during grading activities associated with road and building site clearance; trucks transporting construction materials to the site during parcel development; and, worker trips to and from the job site. Energy consumption during construction related activities would vary substantially depending on the level of activities, length of the construction period, specific construction operations, types of equipment, and the number of personnel. Despite this variability in the construction activities, the overall scope of the anticipated construction at the project site is relatively minor, and would be complete within a few weeks, and therefore, would not require a substantial amount of fuel to complete construction. Additionally, increasingly stringent state and federal regulations on engine efficiency combined with local, state, and federal regulations limiting engine idling times and recycling of construction debris, would further reduce the amount of transportation fuel demand during project construction. Considering the minimal amount of construction activities associated with the project, the proposed project would not result in the wasteful and inefficient use of energy resources during construction and impacts would be less than significant.

Long-term energy consumption would occur after residential build-out of the resultant parcels. Residential uses would consume electricity and/or propane gas for space heating, water heating, and cooking. Whereas, electricity would primarily be used for lighting, appliances, water conveyance and other activities within the home. The project would also generate additional vehicle trips by residents commuting to and from work or to access services, which would result in the consumption of transportation fuel.

State and federal regulatory requirements addressing fuel efficiency are expected to increase fuel efficiency over time as older, less fuel-efficient vehicles are retired, and therefore would reduce vehicle fuel energy consumption rates over time. Therefore, energy impacts related to fuel consumption/efficiency during project operations would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

Less than significant impact. Many of the state and federal regulations regarding energy efficiency are focused on increasing building efficiency and renewable energy generation, as well as reducing water consumption and Vehicles Miles Traveled. The proposed project includes energy conservation measures to meet and exceed the regulatory requirements, including reducing idling time of heavy equipment during construction activities (see Mitigation Measure AIR-1 and GHG-1) and the addition of exterior outlets in residential buildings for recharging electric cars and other household equipment. Additionally, future residential uses on the resultant parcels would also be in compliance with the most recent Title 24 and CalGreen building code standards at the time of project construction. Therefore, the proposed project would implement energy reduction design features and comply with the most recent energy building standards and would not result in wasteful or inefficient use of nonrenewable energy sources.

1.7 GEOLOGY AND SOILS

	ENVIRONMENTALISSUES		Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII	. Geology and Soils.				
Wo	ould the project:				
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 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 California Geological Survey Special Publication 42.)				
	ii) Strong seismic ground shaking?			\boxtimes	
	iii) Seismic-related ground failure, including liquefaction?				
	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, as updated), creating substantial direct or indirect risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

Discussion

- 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 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 California Geological Survey Special Publication 42.)

Less than significant impact. No known active faults are underlying, or adjacent to, the project site. The Cleveland Hill fault is the only active fault zone in Butte County identified in the most recent Alquist-Priolo Earthquake Fault Zoning Map. The Cleveland Hill fault is located east of Dunstone Drive and Miners Ranch Road, between North Honcut Creek and Mt. Ida Road, approximately 4± miles southeast of the City of Oroville. Because the nearest active fault is located a considerable distance from the project site, the likelihood of a surface rupture at the project site is very low, and would not be a design consideration for future development.

ii) Strong seismic ground shaking?

Less than significant impact. Ground shaking at the project site could occur due to the earthquake potential of the region's active faults. However, active faults are relatively distant from the project site and would result in low to moderate intensity ground shaking during seismic events. Future residential development on the resultant parcels would be subject to the California Building Code (CBC). The CBC would provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating the design, construction, quality of materials, use and occupancy, location, and maintenance of buildings and structures within Butte County. Adherence to the CBC during building construction would ensure that potential impacts are less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. According to Butte County General Plan 2030, areas that are at risk for liquefaction can be found on the valley floor, especially near the Sacramento and Feather Rivers, and their tributaries, which have a higher potential to contain sandy and silty soils. The California Building Code (CBC) regulates the construction of structures, which may be constructed with the approval of the proposed project. Adherence to CBC standards at the time of development of the resultant parcels would ensure that new structures are adequately sited and engineered to reduce impacts related to seismic ground failure, including liquefaction, are less than significant.

iv) Landslides?

Less than significant impact. Slopes in the project site vary, however, the landslide potential for the project site and surrounding area is low to the geological composition of the site. Though the potential for landslides is generally low, shallow slope failures can occur in virtually any sloping terrain during construction activities. Avoidance of potentially sensitive slopes and/or implementation of appropriate engineering and construction measures at the time of development would avoid or reduce the potential impacts of landslides to a less than significant level.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. According to Figure 4.6-4 of Butte County General Plan 2030, the project site has a moderate potential of soil erosion. Nevertheless, surface soil erosion and loss of topsoil have the potential to occur in any area of the county from disturbances associated with the construction-related activities.

Construction activities could also result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at the construction site and staging areas.

During construction-related activities, specific erosion control and surface water protection methods for each construction activity would be implemented on the project site. The type and number of measures implemented would be based upon location-specific attributes (i.e., slope, soil type, weather conditions). These control and protection measures, or BMPs, are standard in the construction industry and are commonly used to minimize soil erosion and water quality degradation.

Additionally, future construction activities may be subject to the National Pollutant Discharge Elimination System (NPDES) General Construction Activities Storm Water permit program if one acre or more of land is disturbed. Construction activities that result in a land disturbance of less than one acre, but which are part of a larger common plan of development, also require a permit. This program requires the implementation of erosion control measures during and immediately after construction that are designed to avoid significant erosion during the construction period. Also, the project operation would be subject to State Water Resources Control Board requirements for the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) to control pollution in stormwater runoff from the project site, including excessive erosion and sedimentation. The SWPPP, if required, must be obtained before any soil disturbance activities. Implementation of standard erosion control BMP's during future construction-related activities, together with adherence to State requirements regarding grading activities, would ensure that potential erosion impacts are less than significant.

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?

Less than significant impact. According to Butte County General Plan 2030, the project site is located in an area with a low or no potential of landslides, subsidence or liquefaction. However, destabilization of natural or constructed slopes could occur as a result of future construction activities. Excavations, grading, and fill operations associated with parcel development could alter existing slope profiles making them unstable as a result of over-excavation of slope material, steepening of the slope, or increased loading. Standard engineering design features and construction procedures would be implemented to maintain stable slopes and excavations during construction, reducing the impacts of unstable slopes to a less than significant level.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Less than significant impact. According to Figure 4.6-3 of Butte County General Plan 2030, the project site is located in an area with a moderate potential to have expansive soils. Expansive soils can cause structural damage particularly when concrete structures are in direct contact with the soils. Appropriate design features to address expansive soils may include excavation of potentially problematic soils during construction and replacement with engineered backfill, ground-treatment processes, the direction of surface water and drainage away from foundation soils, and the use of deep foundations such as piers or piles. Implementation of these standard engineering methods and adherence to California Building Code (CBC) standards at the time of development of the resultant parcels would ensure that any impacts associated with expansive soils would remain less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Less than significant impact. Wastewater disposal on the project site would be handled by new, individual, onsite septic systems. General Plan 2030 includes many policies in the Water Resources Element and the Public Facilities Services Element to address existing septic systems in areas with poor soils and to ensure the safety of future septic systems. To ensure the safety of new septic systems, Policy PUB-P13.2 requires new development to demonstrate the availability of a safe, sanitary, and environmentally sound wastewater system. Similarly, Policy PUB-P13.3 requires applicants of projects that will rely on on-site wastewater systems to provide detailed plans demonstrating that the system will be adequate to serve the project (Butte County General Plan 2030 EIR).

The applicant completed a pre-application review with the Butte County Department of Environmental Health, per Chapter 19 of Butte County Code (On-Site Wastewater Systems). As part of the review, an initial septic area on the resultant parcels was evaluated and determined to have adequate soil conditions to allow for the future development of an on-site wastewater system. Future development requiring wastewater disposal is required to receive an On-Site Wastewater System Construction Permit from Environmental Health. Application for a Construction Permit will include detailed plans of the proposed wastewater system, prepared by a Certified Installer or Certified Designer, which will demonstrate compliance with County regulations and the County's On-Site Wastewater Manual, and to ensure a safe, sanitary, and environmentally sound wastewater system.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than significant impact. The project site consists of two geological unit types. Ninety percent of the project site is classified as Olivine Basalt of Cohasset Ridge (Tbc). Ten percent of the project site, along the southern boundary line, is classified as a Tuscan Formation-Unit B (Ttb). Both geologic units were created during the Pliocene age, which dates between 1.8 million years to 5 million years. The Olivine Basalt of Cohasset Ridge unit contains Gray vesicular porphyritic basalt flows with olivine phenocrysts as much as 6 mm in diameter set in a diktytaxitic matrix of plagioclase and clinopyroxene. The maximum thickness of this unit is about 25 meters. Tuscan Formation Unit B is interbedded lahars, volcanic conglomerate, volcanic sandstone, and siltstone similar, and underlies the Ishi Tuff Member. Lahars and volcanoclastic rocks interbedded in approximately equal proportions give a more regularly layered sequence, with a maximum thickness of conglomerate layers of about 15 m. Coarse cobble to boulder conglomerate predominant in the eastern and northern parts of the mapped unit; crossbedded and channeled volcanic sandstone increases in abundance to the west and south. This unit is about 130 meters thick (Geology of the Northern California Sacramento Valley, 2014).

The basalt layers associated with these geologic units are typically devoid of significant vertebrate fossils, and no previously recorded fossil sites have been identified on the project site or the surrounding area. Therefore, it is not likely that unique paleontological resources would be found in local sediments. Further, the discovery of fossils and the subsequent opportunity for data collection and study is a rare event that could occur from construction grading activities associated with development. As a result, the probability of encountering fossils on the project site is low and would have a less than significant impact on previously unknown paleontological resources.

1.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Greenhouse Gas Emissions.				
Would the project:				
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?				

Environmental Setting

The Butte County Climate Action Plan (CAP) was adopted on February 25, 2014. The Butte County CAP provides goals, policies, and programs to reduce greenhouse gas emissions (GHG) emissions, address climate change adaptation, and improve the quality of life in the county. The Butte County CAP also supports statewide GHG emission-reduction goals identified in AB 32 and SB 375. Programs and actions in the CAP are intended to help the County sustain its natural resources, grow efficiently, ensure long-term resiliency to a changing environmental and economic climate, and improve transportation. The Butte County CAP also serves as a Qualified GHG Reduction Strategy under CEQA, simplifying development review for new projects that are consistent with the CAP.

A 2006 baseline GHG emission inventory was prepared for unincorporated Butte County. The inventory identified the sources and the amount of GHG emissions produced in the county. The leading contributors of GHG emissions in Butte County are agriculture (43%), transportation (29%), and residential energy (17%). The Climate Action Plan (CAP) adopted by the County provides a framework for the County to reduce GHG emissions while simplifying the review process for new development. Measures and actions identified in the CAP lay the groundwork to achieve the adopted General Plan goals related to climate change, including reducing GHG emissions to 1990 levels by 2020.

New projects are evaluated to determine consistency with the CAP and to identify which GHG emission reduction measures would be implemented with project approval. These measures may include the expansion of renewable energy systems for new residential development by prewiring future development for photovoltaic systems; reduction of construction equipment idling time; and, installation of electric vehicle charging outlets in the garage or the exterior of the home.

Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. The project is a minor subdivision that would contribute greenhouse gas emissions during parcel development, and by the subsequent uses on the resultant parcels. Construction-related emissions during parcel development may be generated from construction equipment exhaust, construction employee vehicle trips to and from the worksite, architectural coatings, and asphalt paving. The project's construction GHG emissions would occur over a short duration and would consist primarily of emissions from equipment exhaust. The long-term regional emissions associated with the project would primarily occur from the creation of new vehicular trips and indirect source emissions, such as electricity usage for lighting.

The proposed project would be required to implement **Mitigation Measure GHG-1**, which reduces project emissions of heavy-duty diesel-powered equipment during construction and long-term GHG emissions associated with future uses on the resultant parcels. Implementation of this measure would minimize project-related GHG emissions to the extent feasible, consistent with AB 32 GHG reduction goals, and would, therefore, result in a less than significant impact.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The project is subject to compliance with AB 32 greenhouse gas emission reduction goals, which are to reduce statewide GHG emissions to 1990 levels by 2020. Additionally, development on the resultant parcels would be subject to Title 24, California Building Code, which includes CalGreen standards. These standards include mandatory measures that address planning and design, energy efficiency, water efficiency/conservation, material conservation, and resource efficiency, and environmental quality. Implementation of **Mitigation Measure GHG-1** would mitigate project-generated GHG emissions through programmatic-level measures established through the Butte County CAP. The project's compliance with the applicable policies and measures in the CAP would, in turn, meet the statewide GHG emission reduction goals.

Mitigation Measures

Mitigation Measure GHG-1

The project proponent shall implement the following measures during construction-related activities and at the time of development to offset the anticipated contribution of greenhouse gas emissions:

- Prewire all new residential development to support photovoltaic system installation.
- Install electrical vehicle outlets on external walls or in garages in all new residential development.
- Minimize equipment idling time during construction activities either by shutting equipment off when not in use or reducing the time of idling to no more than 3 minutes.
- Use clean or alternative fuel equipment during construction-related activities to improve fuel efficiency.

Plan Requirements: The measure shall be placed on an additional map sheet which is to be recorded with the Parcel Map. This note shall also be placed on all building and site development plans.

Timing: Shall be implemented prior to the issuance of building permits for residential development. Construction-related measures shall be adhered to throughout all grading and construction periods.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the measure is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. The Planning Division will ensure that future residential development includes the applicable measures during Building Permit review. Building inspectors shall spot check and shall ensure compliance on-site.

1.9 HAZARDS AND HAZARDOUS MATERIALS

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	LessThan Significant Impact	No Impact
IX.	Hazards and Hazardous Materials.				
Wo	ould the project:				
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/or accident conditions involving the release of hazardous materials into the environment?				
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 Section 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 or, where such a plan has not been adopted, within two miles of a public airport or 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?				

Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant impact. Limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, etc. would be used to maintain vehicles and motorized equipment during construction-related activities. An accidental spill of any of these substances could impact water and/or groundwater quality. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose a hazard to construction workers, the public, as well as the environment. Construction personal who are experienced in containing accidental releases of hazardous

materials will be present to contain and treat affected areas in the event a spill occurs. If a larger spill were to occur, construction personal would generally be on-hand to contact the appropriate agencies.

It is not anticipated that large quantities of hazardous materials would be permanently stored or used within the project site. However, if large quantities are stored at the project site, the owner would be required to obtain a Hazardous Materials Business Plan. It is more likely that only small quantities of publicly-available hazardous materials (e.g., paint, maintenance supplies) may be routinely used within the project site for residential or agricultural maintenance and cleaning. However, these materials would not be used in sufficient strength or quantity to create a substantial risk of fire or explosion, or otherwise, pose a substantial risk to human or environmental health.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?
 - Less than significant impact. It's not anticipated that construction or operation of future residential development or agricultural uses would create a significant hazard to the environment or the public due to the accidental release of hazardous materials into the environment. Accidental release of hazardous materials routinely used during construction activities are addressed in section a.), above.
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
 - No impact. No existing or proposed schools have been identified within one-quarter mile of the project site.
- 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?
 - **No impact.** A review of regulatory agency databases, which included lists of hazardous materials sites compiled pursuant to California Government Code Section 65962.5, did not identify a contamination site within one-quarter mile of the project site.
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
 - Less than significant impact. Chico Airport is located approximately 1.5 miles southwest from the project site. Compatibility Zone D for the Chico Municipal Airport is defined as the outer boundary of the Federal Aviation Regulations (FAR) Part 77 conical zone limits, subjecting lands to reviews to ensure that objects and land uses do not affect the navigable airspace of the airport. Uses prohibited within Zone D include any hazards to the flight of the aircraft such as physical, visual and electronic forms of interference, and land uses which may cause the attraction of birds to increase. Conditions to development within Zone D include the establishment of an avigation easement dedication with acknowledgment of airport proximity and review of objects greater than 100 feet in height. Approval of the proposed project will be subject to implementing the requirements of the Butte County Airport Land Use Compatibility Plan to ensure airport operations due not affect persons residing on the project site, or that future land uses on the project site do not adversely affect airport and aircraft operations, which will be included as standard conditions of approval.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No impact. The proposed project would design, construct, and maintain roadways and driveways following applicable standards associated with vehicular access, resulting in roadways that provide for adequate emergency access and evacuation. The project does not include any actions that physically interfere with any emergency response or emergency evacuation plans. Development of the resultant parcels would add a small number of trips onto the area roadways; however, area roadways and intersections would continue to operate at an acceptable level of service. Additionally, no road improvements within a County right-of-way is anticipated.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Less than significant impact. The project site is designated as a high fire hazard by the State Department of Forestry and Fire Protection. The project site is also within a designated State Responsibility Area (SRA), which means that the State has fiscal responsibility for preventing and suppressing wildfires. Due to the heightened risk of wildfire and increased potential for damage or loss in SRAs, development within these areas must comply with special building requirements established in Chapter 7A of the California Building Code and Chapter 47 of the California Fire Code. SRAs are also regulated under Public Resources Code 4290 and 4291, which establish standards for access, signage, maintenance of defensible space and vegetation management. These standards will be included as conditions of approval and implemented at the time of development of future structures. Implementation of these standards, as well as oversight by Butte County Fire/Cal Fire, would ensure the proposed project would not expose people or structures to significant risk or loss, injury or death involving wildland fires.

1.10 HYDROLOGY AND WATER QUALITY

	ENVIRONMENTAL ISSUES		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X.	Hydro	logy and Water Quality.				
Wo	ould the	project:				
a)	require	e any water quality standards or waste discharge ements or otherwise substantially degrade e or groundwater quality?				
b)	interfe	ntially decrease groundwater supplies or re substantially with groundwater recharge such e project may impede sustainable groundwater pement of the basin?				
c)	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 which would:					
	i)	Result in substantial on- or offsite erosion or siltation;				
	ii)	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				
	iii)	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				
	iv)	Impede or redirect flood flows?			\boxtimes	
d)		d hazard, tsunami, or seiche zones, risk release utants due to project inundation?				
e)						

Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than significant impact. Butte County General Plan 2030 identifies the soil conditions of the project site has a moderate potential to erode. Though the potential for erosion is moderate, site development and future build-out of the resultant parcels would require grading, excavation, and general site preparation activities, which could result in erosion of on-site soils and sedimentation during a storm or high wind events. Erosion of on-site soils may temporarily impact surface water quality and water quality within nearby waterways. Downstream impacts from erosion may include increased turbidity and suspended sediment concentrations in

waterways. Eroded soils also contain nitrogen, phosphorus, and other nutrients, that when deposited in water bodies, can trigger algal blooms that reduce water clarity, deplete oxygen, and create odors.

During construction-related activities, specific erosion control and surface water protection methods for each construction activity would be implemented on the project site by construction personnel. The type and number of measures implemented would be based upon location-specific attributes (i.e., slope, soil type, weather conditions). These control and protection measures, or BMPs, are standard in the construction industry and are commonly used to minimize soil erosion and water quality degradation.

Future construction activities may be subject to the National Pollutant Discharge Elimination System (NPDES) General Construction Activities Storm Water permit program if one acre or more of land is disturbed. Construction activities that result in a land disturbance of less than one acre, but which are part of a larger common plan of development, may also require a permit issued by the California Regional Water Quality Control Board. This program requires the implementation of erosion control measures during and immediately after construction that are designed to avoid significant erosion during the construction period. Project operations that are under an NPDES permit would also be subject to the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) to control pollution in stormwater runoff from the project site. A condition of approval reflecting the requirement of the applicant to obtain an NPDES permit, before grading activities, will be included with project approval.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than significant impact. Domestic water to existing and planned uses on the resultant parcels would be provided by groundwater extraction via individual wells. Section 12.0 of the Butte County Improvement Standards outline the requirements of water supplies for proposed subdivisions and parcel maps. Proposed subdivisions located outside an urban area and more than a 1,000 feet from an existing public water system, or subdivisions consisting of four new lots or less, may have domestic water supplied by individual wells. The quantity and quality of the groundwater for the proposed development is reviewed by the Butte County Environmental Health Division by either a test well, a review of existing wells in the area, or a statement from a licensed well driller together with a report by an engineering geologist or hydrologist verifying that minimum well production for domestic purposes are achieved.

General Plan 2030 and the associated Environmental Impact Report included several actions and policies to address groundwater supplies and sustain groundwater resources. Butte County also has adopted the Butte County Integrated Water Resources Plan and Butte County Groundwater Management Plan and has performed an analysis of long-term water usage and supplies with the 2001 Butte County Water Inventory and Analysis. The findings contained in these reports, together with the application of these existing policies and plans, led Butte County to conclude that the growth anticipated with General Plan 2030 would have a less than significant impact on groundwater supplies.

The proposed project would have a minimal net increase in impervious surfaces added to the project site from the development of new residences or other structures such as from concrete foundations and access road surfacing. The projected increase would not cause a measurable reduction in surface infiltration or a decrease in deep percolation to the underlying aquifers because the density of the development would continue to provide open areas to allow for runoff infiltration.

- 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 which would:
 - i) Result in substantial on- or offsite erosion or siltation;

Less than significant impact. Minimal vegetation removal and soil disturbance would occur during the clearing of building sites and for the access road (less than one acre). During construction-related activities, specific erosion control and surface water protection methods for each construction activity would be implemented on the project site by construction personnel. The type and number of measures implemented would be based upon location-specific attributes (i.e., slope, soil type, weather conditions). These control and protection measures, or BMPs, are standard in the construction industry and are commonly used to minimize soil erosion and water quality degradation. The application of BMPs administrated through the construction process would minimize the potential increase of surface runoff from erosion.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less than significant impact. The minor increase in impervious surface area from build-out of the resultant parcels are not anticipated to be enough to alter existing drainage patterns or cause offsite flooding. While an increase in stormwater runoff may be expected due to the reduced absorption rate created from new impervious surfaces added to the site, such as from structures, driveways, and hardscape (walkways, patios), future development would be reviewed by the Butte County Public Works Department to ensure any potential drainage concerns are addressed, and to ensure no net increase in stormwater runoff leaves the project site.

iii) 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

Less than significant impact. Planned stormwater drainage systems in the project area currently consist of a system of roadside ditches and culverts that capture surface runoff, which ultimately infiltrates into the underground aquifer or conveyed to area waterways.

General Plan 2030 Water Resource Element contains several policies that address stormwater runoff capacity. Policy W-P1.4 encourages Low Impact Development, which minimizes impervious areas, minimizes runoff and pollution, and incorporates best management practices. Policy W-P5.3 allows and encourages pervious pavements. Policy W-P5.5 requires that stormwater collection systems be installed concurrently with the construction of new roadways to maximize efficiency and minimize disturbance due to construction activity. Policy HS-P3.2 requires that applicants for new development provide plans detailing existing drainage conditions and specifying how runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility, without increasing the peak flow runoff to said channel or facility. Policy HS-P3.3 requires that all development include stormwater control measures and site design features that prevent any increase in the peak flow runoff to existing drainage facilities.

The proposed project would generate a minor increase in runoff from the future development of the resultant parcels. Improvements are relatively small and conveyed through a system of existing roadside ditches and culverts to area waterways. The minor increase in runoff would not exceed the capacity of the existing stormwater drainage systems or substantially increase polluted runoff.

iv) Impede or redirect flood flows?

Less than significant impact. The floodplain mapping of the project area identifies the project site being located within the X (shaded) zone. The X (shaded) zone is defined by FEMA as areas between the limits of the 100-year base flood and the 0.2-percent-annual-chance (or 500-year) flood. Future site improvements would be reviewed by Butte County Public Works to ensure that surface flows would be adequately directed to planned and existing stormwater drainage facilities.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No impact. The floodplain mapping of the project area identifies the project site being located within the X (shaded) zone. The X (shaded) zone is defined by FEMA as areas between the limits of the 100-year base flood and the 0.2-percent-annual-chance (or 500-year) flood. The project site is not located in an area that would be impacted by a seiche, tsunami, or mudflow.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No impact. The project site is not located in an area subject to a water quality control plan or sustainable groundwater management plan.

1.11 LAND USE AND PLANNING

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning.				
Would the project:				
a) Physically divide an established community?				\boxtimes
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

Environmental Setting

Butte County General Plan

The General Plan represents the community's values, ideals and aspirations with respect to land use, development, transportation, public services, and conservation policy that will govern Butte County through 2030. The Land Use Element of the General Plan designates the land use of areas within the County and includes a description of the characteristics and intensity of each land use category. The land use designation for the proposed project site is as follows:

Foothill Residential

The foothill residential designation is one of seven residential land use designations that allow for residential uses ranging from very-low-density farmsteads and low-density single-family homes to duplexes and multifamily structures, with the foothill residential consisting of rural densities between 1 to 40 acres. Accessory dwelling units are also allowed in all residential land use designation categories, and are not to be included in the overall density calculations for a given designation. In every residential designation, existing legal parcels smaller than the minimum may remain as legal parcels. The residential land use designations also allow for public and quasi-public land uses that serve the community. Examples of allowable uses include churches, schools, parks and recreational facilities, fire stations, libraries, day care facilities, community centers and other public uses.

Butte County Zoning Ordinance

The Zoning Ordinance implements the goals and policies of the Butte County General Plan by regulating the uses of land and structures within the County. The zoning designation of the proposed project site and the intended uses of the site are as follows:

Foothill Residential, 20-acre minimum parcel size (FR-20)

The purpose of the FR zone is to allow for the appropriate development of large-lot single-family home, small farmsteads, and related uses in the foothill areas of the county. Standards for the FR zone are intended to ensure that the development of homes respond sensitively to the foothill setting. Permitted residential uses in the FR zones include a single-family home, small residential care home, and an accessory dwelling unit. The FR zone also conditionally permits non-residential uses compatible with a low-density rural setting, including public and quasi-public uses, mining, animal services, hunting and fishing clubs, nurseries, and commercial stables. Animal grazing, crop cultivation, private stables, on-site agricultural product sales, and other similar agricultural activities are permitted uses in the FR zone. The minimum permitted parcel size in the FR zone ranges from one (1) acre to forty (40) acres. The project site is zoned for a parcel size of twenty (20) acres.

Airport Compatibility Overlay Zone

The Butte County Airport Land Use Commission is charged with promoting land use compatibility around the county's airports as a means to minimize public exposure to excessive noise and safety hazards. This is accomplished through the preparation and periodic update of an Airport Land Use Compatibility Plan (ALUCP), the most recent of which was adopted in 2017. The ALUCP covers the Chico Municipal Airport, the Oroville Municipal Airport, Paradise Skypark Airport and Ranchaero Airport.

<u>Deer Herd Migration Overlay Zone – Winter Migration Area (-DH)</u>

This overlay includes Winter and Critical Winter deer herd migration areas. The Winter Deer Herd Migration Area Overlay requires a minimum lot size of 20 acres, and the Critical Winter Deer Herd Migration Area Overlay requires a minimum lot size of 40 acres. Development may be clustered at smaller lot sizes than these minimums in order to protect the deer herd areas, provided that the non-development areas are protected under permanent conservation easements. The Deer Herd Migration Overlay zone is intended to protect sensitive habitat areas for migratory deer herds while continuing to allow development and the reasonable use of land within these areas.

Discussion

a) Physically divide an established community?

No impact. The project area is located in rural Butte County and surrounded by residential and agricultural operations on parcel sizes that range from 5 acres to 40 acres. No communities are present either within the project area or in the immediate vicinity; therefore, the project would not physically divide an established community.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than significant impact. The proposed project including future uses on the resultant parcels are consistent with density and uses permitted under the General Plan land use and zoning designations for the project site and, as detailed throughout this Initial Study, the General Plan's applicable goals, policies and actions. In addition, all impacts on the environment resulting from the proposed project are subject to applicable mitigation and local, State and/or federal regulations, which would reduce those impacts to less than significant levels. Therefore, impacts related to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to General Plan 2030, specific plan, Airport Land Use Compatibility Plan or County ordinances) adopted for the purpose of avoiding or mitigating an environmental effect are less than significant.

1.12 MINERAL RESOURCES

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII	. Mineral Resources.				
Wo	ould the project:				
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?				
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?				

Discussion

- 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?
 - Less than significant impact. There are no known economically viable sources of rock materials near the project site. No mining operations have occurred on the project site or surrounding area, and the project would not preclude future extraction of available mineral resources. Mineral resource extraction is not proposed with this project. However, future development on the resultant parcels would use mineral resources in the construction of structures and access roads. The amount of resources used for development on the resultant parcels are minor and would not result in the loss of its availability.
- 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?
 - **No impact.** The project site is not within or near any designated locally-important mineral resource recovery site.

1.13 **NOISE**

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII	I.Noise.				
W	ould the project result in:				
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 in other applicable local, state, or federal standards?					
b)	Generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

Environmental Setting

According to the Butte County General Plan 2030, noise is a concern throughout Butte County, but especially in rural areas and in the vicinity of noise-sensitive uses such as residences, schools, and churches. Noise is discussed in the Health and Safety Chapter of the Butte County General Plan 2030. Tables HS-2 and HS-3 in the County General Plan (included as Tables 1.13-1 and 1.13-2 below) outline the maximum allowable noise levels at sensitive receptor land uses.

Table 1.13-1. Maximum Allowable Noise Exposure Transportation Noise Sources

	Exterior Noise Leve Outdoor Activ		Interior Noi Standa	
LAND USE	L _{dn} /CNEL, dB	L_{eq} , dBA^b	L _{dn} /CNEL, dB	L _{eq} , dBA ^b
Residential	60°	-	45	-
Transient Lodging	60°	-	45	-
Hospitals, nursing homes	60 ^c	-	45	-
Theaters, auditoriums, music halls	-	-	-	35
Churches, meeting halls	60 ^c	-	-	40
Office Buildings	-	-	-	45
Schools, libraries, museums	-	70	-	45
Playgrounds, neighborhood parks	-	70	-	-

Source: Table HS-2, Butte County General Plan 2030

^a Where the location of outdoor activity areas is unknown, the exterior noise-level standard shall be applied to the property line of the receiving land use.

^b As determined for a typical worst-case hour during periods of use.

^c Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn/CNEL may be allowed, provided that available exterior noise-level reduction measures have been implemented and interior noise levels are in compliance with this table.

Table 1.13-2. Maximum Allowable Noise Exposure Non-Transportation Noise Sources

	Daytime 7 am - 7 pm		Evening 7 pm - 10 pm		Night 10 pm - 7 am	
NOISE LEVEL DESCRIPTION	Urban	Non-Urban	Urban	Non-Urban	Urban	Non-Urban
Hourly Leq (dB)	55	50	50	45	45	40
Maximum Level (dB)	70	60	60	55	55	50

Source: Table HS-3, Butte County General Plan 2030

Notes:

- 1. "Non-Urban designations" are Agriculture, Timber Mountain, Resource Conservation, Foothill Residential and Rural Residential. All other designations are considered "urban designations" for the purposes of regulating noise exposure.
- 2. Each of the noise levels specified above shall be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g. caretaker dwellings).
- 3. The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.
- 4. In urban areas, the exterior noise level standard shall be applied to the property line of the receiving property. In rural areas, the exterior noise level standard shall be applied at a point 100 feet away from the residence. The above standards shall be measured only on property containing a noise sensitive land use. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all affected property owners and approved by the County.

Table 1.13.1, above, identifies the maximum allowable noise exposure to a variety of land uses from transportation sources, including from roadways, rail and airports. Table 1.13-2 identifies the maximum allowable noise exposure from non-transportation sources. In the case of transportation noise sources, exterior noise level standards for residential outdoor activity areas are 60 dB (Ldn/CNEL). However, where it is not possible to reduce noise in an outdoor activity area to 60 dB Ldn /CNEL or less using a practical application of the best-available noise-reduction measures, an exterior noise level of up to 65 dB may be allowed, provided that available exterior noise-level reduction measures have been implemented and interior noise levels are in compliance with applicable standards.

Butte County Noise Ordinance

Chapter 41A, Noise Control, of the Butte County Code of Ordinance applies to the regulation of noise. The purpose of the noise ordinance is to protect the public welfare by limiting unnecessary, excessive, and unreasonable noise. Section 41A-7 specifies the exterior noise limits that apply to land use zones within the County, which are provided in Table 1.13-2.

The Butte County Noise Ordinance provides the County with a means of assessing complaints of alleged noise violations and to address noise level violations from stationary sources. The ordinance includes a list of activities that are exempt from the provisions of the ordinance; however, some noise-generating activities associated with future residential uses would not be considered to be exempt from the Noise Ordinance. Relevant information related to the exterior and interior noise limits set out by the Butte County Noise Ordinance are included below.

Chapter 41A-9 Exemptions

The following are exempted activities identified in Chapter 41A-9 that are applicable to the proposed project:

- (f) Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property or public works project located within one thousand (1,000) feet of residential uses, provided said activities do not take place between the following hours:
 - Sunset to sunrise on weekdays and non-holidays;
 - Friday commencing at 6:00 p.m. through and including 8:00 a.m. on Saturday, as well as not before 8:00 a.m. on holidays;
 - Saturday commencing at 6:00 p.m. through and including 10:00 a.m. on Sunday; and,
 - Sunday after the hour of 6:00 p.m.

Provided, however, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work into the hours delineated above and to operate machinery and equipment necessary to complete the specific work in progress until that specific work can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner;

- (g) Noise sources associated with agricultural and timber management operations in zones permitting agricultural and timber management uses;
- (h) All mechanical devices, apparatus or equipment which are utilized for the protection or salvage of agricultural crops during periods of adverse weather conditions or when the use of mobile noise sources is necessary for pest control;
- (i) Noise sources associated with maintenance of residential area property, provided said activities take place between 7:00 a.m. to sunset on any day except Saturday, Sunday, or a holiday, or between the hours of 9:00 a.m. and 5:00 p.m. on Saturday, Sunday, or a holiday; and, provided machinery is fitted with correctly functioning sound suppression equipment;

Chapter 41A-8 Butte County Interior Noise Standards

Interior noise standards discussed in Chapter 41A apply to all noise sensitive interior area within Butte County. The maximum allowable interior noise level standards for residential uses is 45 dB Ldn/CNEL, which is designed for sleep and speech protection. The typical structural attenuation of a residence from an exterior noise is 15 dBA when windows facing the noise source is open. When windows in good condition are closed, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling.

Table 1.13-3. Maximum Allowable Interior Noise Standards

NOISE LEVEL DESCRIPTION	Daytime 7 am - 7 pm	Evening 7 pm - 10 pm	Nighttime 10 pm - 7 am			
Hourly L _{eq} (dB)	45	40	35			
Maximum Level (dB)	60	60 55				
Source: Butte County Code Chapter 41A-8, Interior Noise Standards						

Discussion

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 in other applicable local, state, or federal standards?

Less than significant impact. No significant existing noise-generating sources have been identified in the project area. Noise levels contributed by the proposed project would include construction noise during future build-out of the resultant parcels, occupancy of the single-family residences, and agricultural-related activities allowed in the zone. Construction noises associated with the development of the resultant parcel would primarily be from the use of heavy equipment, generators, employee vehicle trips, and power tools. Construction-related noises would be temporary and intermittent, and would not result in long-term noise impacts. Compliance with Butte County Code provisions that exempt construction noise would ensure construction activities occur during daytime hours, making potential impacts less than significant.

Typical noises contributed by residential and agricultural uses include landscaping equipment, automobile traffic, power tools, domestic animals, farm machinery, heating and cooling systems. The noises generated by these activities are not atypical or unusual for residential and agricultural-zoned properties in the project area. These noises also would be intermittent and separated from noise sensitive receptors, and would unlikely exceed County standards. In the event noise levels exceed applicable noise standards, the County will review complaints in accordance with Butte County Code Chapter 41A.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. The proposed project may involve temporary sources of groundborne vibration and groundborne noise from the operation of heavy equipment during the build-out of the proposed project and resultant parcels. The type of heavy equipment typically used during residential construction would only generate localized groundborne vibration and groundborne noise that could be perceptible at residences or other sensitive uses near the construction site. However, since the duration of impact would be infrequent and would occur during less sensitive daytime hours (i.e., between 7:00 a.m. and 7:00 p.m.), the impact from construction-related groundborne vibration and groundborne noise would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No impact. Chico Airport is located approximately 1.5 miles southwest from the project site, within Compatibility Zone D and the Airport Influence Area. According to the Airport Land Use Compatibility Plan for the Chico Airport, the forecasted extent of the 60 dB CNEL (Community Noise Equivalent Level) is situated within the B1 Compatibility Zone and located a considerable distance from the project site. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels from a public use airport or private airstrip.

1.14 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population and Housing.				
 Would the project: a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? 				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

Discussion

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
 - Less than significant impact. Subdivision of the project site would facilitate the potential addition of single-family residential units, which would directly result in growth in available housing and, if occupied, to the local population. Construction activities associated with developing the proposed project would not involve the construction of additional public roadways or infrastructure such as wastewater treatment facilities so as to indirectly induce population growth. Since housing and population generated by the proposed project would not exceed local and regional growth projections described in General Plan 2030, growth generated by the proposed project would not be substantial.
- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?
 - **No impact.** The project site is developed with a single-family residence, which would be retained and situated on resultant Parcel 1 with approval of the proposed project. The proposed project would not result in the loss of existing housing or cause a significant increase in the local population that would displace existing residents, necessitating the construction of additional housing.

1.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services.				
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 public services:				
Fire protection?			\boxtimes	
Police protection?			\boxtimes	
Schools?				
Parks?				
Other public facilities?				

Discussion

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 public services:

Fire protection?

Less than significant impact. Fire protection services are provided by CalFire/Butte County Fire Department. The build-out of the resultant parcels may incrementally increase the demand for fire protection services. However, the population growth expected with this project is consistent with the planned growth documented in the Butte County General Plan 2030. Additionally, Butte County Code requires the payment of fire protection impact fees to help offset the impacts that new residential development has on the fire protection services. Such fees would be used to fund capital costs associated with acquiring land for new fire stations, constructing new fire stations, purchasing fire equipment, and providing for additional staff as needed. Fire protection impact fees would be paid at the time of building permit issuance for a new dwelling unit.

Police protection?

Less than significant impact. The Butte County Sheriff's Office provides law enforcement service to the site. Implementation of the proposed project could increase service calls if additional residential structures are built. Increased development in rural areas impacts the ability of the Sheriff's Department to adequately provide services to outlying areas. It is anticipated that project implementation would not require any new law enforcement facilities or the alteration of existing facilities to maintain acceptable performance objectives. The project's increase in demand for law enforcement services would be partially offset through project-related impact fees.

Schools?

Less than significant impact. The project site is located within the Chico Unified School District. Residential development at the site would result in incremental demand for school facilities in the area. A development impact fee for school facilities will be assessed at the time of residential development on the resultant parcels. Impact fees would partially offset any potential impact on area school facilities. While school districts maintain that these fees do not fully mitigate the impacts of a project, the County is precluded from imposing additional fees or mitigation by State legislation.

Parks?

Less than significant impact. The project site is located within the Chico Recreation and Park District (CARD). The build-out of the resultant parcels would result in an incremental increase in the use of existing local and regional park facilities. Development impact fees will be assessed at the time of residential development which will offset potential impacts to park facilities.

Other public facilities?

Less than significant impact. The project does not require the extension of any public infrastructure, such as roads, water, or sewer systems. The project would result in an added need for County services, such as law enforcement, fire protection, libraries, and road maintenance. Butte County collects various types of development impact fees to partially offset the cost and impacts associated with new residential units. These fees vary depending on the dwelling type and are collected at the time of development.

1.16 RECREATION

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ΧV	I. Recreation.				
Wo	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?				
b)	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				

Environmental Setting

The project site is located within the Chico Recreation and Park District (CARD). The district covers an area of approximately 208 square miles and includes the City of Chico. The district operates and maintains approximately 214 acres of developed parkland and facilities to serve a population of approximately 104,367 residents. This translates into a level of service of 1.85 acres of parklands for every 1,000 residents. The total park facilities operated by the district do not include Bidwell Park and parks operated by State and Federal agencies. No park facilities are located in the vicinity of the project site; however, it's anticipated that future residents of the project site would likely use facilities located in the City of Chico, as well as nearby State-operated facilities, to meet their recreational needs.

Discussion

a) 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?

Less than significant impact. An increase in the demand for recreational facilities is typically associated with substantial increases in population. As discussed in Section 1.14 - Population and Housing, the proposed project may generate growth in the local population, if residential units are constructed on the resultant parcels. This, in turn, may result in increased use of existing parks and recreational facilities in the surrounding area and the parks and recreation district servicing the area. However, because housing and population growth in the project area would be minor (i.e., 2 - 4 new residents with project buildout), the project would not result in a substantial increase in demand for recreational facilities or adversely affect Butte County or City of Chico park/population standards.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No impact. The proposed project does not include plans for additional recreational facilities nor would it require expansion of existing recreational facilities. Therefore, the proposed project would not result in any adverse physical effects on the environment from construction or expansion of recreational facilities.

1.17 TRANSPORTATION

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV	II. Transportation.				
Wo	ould the project:				
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?				
b)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
c)	Result in inadequate emergency access?			\boxtimes	

Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less than significant impact. The property's frontage (Cohasset Road) is improved with paved shoulders and roadside drainages, but no pedestrian or bike facilities. Cohasset Road is designated as a proposed Class 2 bike lane, from the Chico city limits to Mud Creek Road. The Class 2 bikeway classification provides a restricted on-street right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorist permitted. Standards generally require a minimum 4-foot bike lane with a 6-inch white stripe separating the roadway from the bike lane. Where raised curbs exists without permitted parking or designated marked parking exists, a minimum 5-foot bike lane adjacent to the traffic lane is required. Where parking is permitted, but unmarked, the 6-inch white stripe separating the traffic from the bike lane must be a minimum of 12 feet from the raised curb.

No existing transit facilities are located near the project site. The nearest B-Line bus stop is located along at the intersection of East Eaton Road and Cohasset Road, approximately 4.5 miles south from the project site.

Though no pedestrian facilities or bike lanes are located along Cohasset Road, sufficient right-of-way width exists along the County road the property's frontage to allow for pedestrians and bicycle traffic to travel outside the vehicle travel lane. Improvements to bring the frontage into compliance as a Class 2 Bike Lane is limited to additional striping and signage. Butte County Public Works reviewed the proposed project and has not recommended additional bike transportation improvements.

Future development on the resultant parcels would have minor long-term impacts on alternative transportation facilities due to the limited population growth to the project area. Construction activities associated with future development may generate short-term disruption to area roadways from an anticipated increase in traffic levels that may affect alternative transportation uses. However, construction activities associated with the proposed project would be temporary and would require traffic control implementation, if needed.

b) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than significant impact. The proposed project would not change the configuration (alignment) of area roadways, and would not introduce types of vehicles that are not already traveling on area roads. The proposed project includes using an existing private driveway to access the resultant parcels. Improvements to the driveway may include widening, turnouts and a vehicle turnaround. Any future would subject to review by Butte County Public Works. No atypical road design features have been identified on the existing area roadways that would cause a safety hazard.

c) Result in inadequate emergency access?

Less than significant impact. The project site is located in a State Responsibility Area (SRA). SRAs are regulated by Public Resources Code 4290 and 4291 (*California Fire Safe Regulations*), which establish standards for access roads and signage. These standards will be included as conditions of approval and implemented at the time of development of future structures. Implementation of these standards, as well as oversight by Butte County Fire/Cal Fire, would ensure that the resultant parcels have adequate emergency access.

1.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	LessThan Significant Impact	No Impact
XVIII. Tribal Cultural Resources.				
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)?	⊠ Yes		☐ No	
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a Californ Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?				
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				

Environmental Setting

Tribal Cultural Resources are defined as a site feature, place, cultural landscape, sacred place or object, which is of cultural value to a Tribe and is either on or eligible for the California Historic Register, a local register, or a resource that the lead agency, at its discretion, chooses to treat as such (Public Resources Code Section 21074 (a)(1)).

Butte County contains a rich diversity of archaeological, prehistoric and historical resources. The General Plan 2030 EIR observes that the "archaeological sensitivity of Butte County is generally considered high, particularly in areas near water sources or on terraces along water courses" (Butte County General Plan EIR, 2010, p. 4.5-7).

A substantial adverse change upon a historically significant resource would be one wherein the resource is demolished or materially altered so that it no longer conveys its historic or cultural significance in such a way that justifies its inclusion in the California Register of Historical Resources or such a local register (CEQA Guidelines Section 15064.5, sub. (b)(2)). Cultural resources include prehistoric and historic period archaeological sites; historical features, such as rock walls, water ditches and flumes, and cemeteries; and architectural features. Cultural resources consist of any human-made site, object (i.e., artifact), or feature that defines and illuminates our past. Often such sites are found in foothill areas, areas with high bluffs, rock outcroppings, areas overlooking deer migratory corridors, or near bodies of water.

Per Assembly Bill AB 52 (Statutes of 2014) Notification Request, Public Resources Code Section 21080.3(b), the County received two letters for notification. One was from the Torres Martinez Cahuilla Indians, located in southern California near the Salton Sea, and the other was from United Auburn Indian Community, located near the City of Auburn. It was determined through discussion with the Torres Martinez Cahuilla Indians that they do not identify lands within Butte

County within their geographic area of traditional and cultural affiliation. The United Auburn Indian Community provided a map of their area of traditional and cultural affiliation, which did not include the project site.

Discussion

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Less than significant impact. See Discussion Section 1.5 – Cultural Resources. Based on the archaeological report prepared for the project, Site GE19-0005 is not recommended for inclusion in the California Register of Historic Resources or the National Register of Historic Places. The archaeologist indicated the rock wall was representative of historic era activities in the region but did not retain information or research values sufficient to conclude that it would qualify for inclusion, and therefore, is not a significant resource under CEQA Guidelines. The report also noted that the feature is not a unique, one-of-a-kind representation, and hence does not possess significant exhibition or interpretive values. The report also indicates that the wall has undergone alteration for the existing gravel approach to the project site.

Site GE-19006 is eligible for inclusion in the National Register of Historic Places under Criterion D. The nature or presence of subsurface deposits have not been investigated, and due to the potential for additional analysis such as a starch grain analysis, the archaeologist noted that GE-19006 has the potential to yield information important to the prehistory of the region. Additionally, GE-19006 lies approximately a quarter mile north of the National Register listing of Mud Creek Canyon Archaeological District and may contribute to the further understanding of prehistoric occupation and history of the region.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than significant impact with mitigation incorporated. See Discussion Section 1.5 – Cultural Resources. The archaeological assessment determined that the project site contained evidence of archaeological resources that may yield important information regarding the prehistory of the region due to the nature of the find and its close proximity to the Mud Creek Canyon Archaeological District.

Due to the significance of site GE-19006, it is recommended that any disturbance of the site is avoided to prevent potential adverse effects including but not limited to physical alteration, damage, or destruction of the resource. The location of future development within the resultant parcels including any future ground-disturbing activities such as grading, excavation, and site clearance are not known at this time. Therefore, specific impacts to the resource cannot be known until the design of the development is finalized. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce impacts to identified and unidentified archaeological resources.

Implementation of **Mitigation Measure CUL-1** would ensure that all construction activities that inadvertently discover prehistoric or historic resources including human remains implements state required consultation methods to determine the disposition and historical significance of any discovered artifacts. Implementation

of **Mitigation Measure CUL-2** would provide the lead agency an opportunity to review the proposed development in context with the identified archaeological resources to ensure appropriate avoidance of the resource. And, if future development activities have the appearance of potentially impacting the resource, to seek out additional consultation with an archaeologist and the Native American Community.

1.19 UTILITIES AND SERVICE SYSTEMS

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX	Utilities and Service Systems.				
Wo	uld the project:				
a)	Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation 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?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

Environmental Setting

Solid Waste

Most municipal wastes are hauled to the Neal Road Recycling and Waste Facility, which is owned by Butte County and managed by the Butte County Department of Public Works. The Neal Road Facility is located at 1023 Neal Road, one mile east from State Highway 99, and seven miles southeast of Chico, on 190 acres owned by Butte County. The Neal Road Facility is permitted to accept municipal solid waste, inert industrial waste, demolition materials, special wastes containing nonfriable asbestos, and septage. Hazardous wastes, including friable asbestos, are not accepted at the Neal Road Facility or any other Butte County disposal facility, and must be transported to a Class I landfill permitted to receive untreated hazardous waste. The Facility has a design capacity of 25,271,900 cubic yards, and is permitted to accept 1,500 tons per day; however, the average daily disposal into the landfill is approximately 466 tons. As of November 2017, the remaining capacity of the Neal Road Facility is approximately 15,449,172 cubic yards, which would give the landfill a service life to the year 2048 (Neal Road Recycling & Waste Facility, 2017).

Discussion

a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

No impact. The project site is currently served by electric power (PG&E) and wireless phone service. The project would not result in the relocation or construction of new or expanded infrastructure including water services, wastewater treatment, stormwater drainage, natural gas, or telecommunication facilities.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than significant impact. Domestic water to existing and planned uses on the resultant parcels would be provided by groundwater extraction via individual wells. Section 12.0 of the <u>Butte County Improvement Standards</u> outline the requirements of water supplies for proposed subdivisions and parcel maps. Proposed subdivisions located outside an urban area and more than 1,000 feet from an existing public water system, may have its domestic water supplied by individual wells. The quantity and quality of the groundwater for the proposed development is reviewed by the Butte County Environmental Health Division by either a test well, a review of existing wells in the area, or a statement from a licensed well driller together with a report by an engineering geologist or hydrologist verifying that minimum well production for domestic purposes are achieved. Additionally, a well permit is required by the County to ensure well drilling standards are achieved and health and safety standards are met. Well production from new wells would be tested to determine if sufficient output is available for the anticipated uses to occur on the resultant parcels. Based on these reviews, existing groundwater supplies are anticipated to be available to serve the proposed project, and no additional or expanded entitlements are required for groundwater extraction and use.

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?

No impact. Wastewater disposal for the proposed project would be provided by private, on-site septic systems. No wastewater treatment provider currently serves the project area. The project site has been evaluated for an on-site septic system and the resultant parcels were determined to have adequate soil conditions to allow for the future development of an on-site wastewater system.

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?

Less than significant impact. Future development of the resultant parcels would result in a minor increase in the stream of household waste being deposited in the Neal Road Recycling and Waste Facility. The California Integrated Waste Management Board estimates that a typical residential household generates approximately 12 pounds of solid waste per day (4.9 pounds per person per day x average household size in Butte County (2.44)). The Neal Road Facility has a maximum permitted throughput of 1,500 tons per day, and an estimated current daily average throughput of 466 tons per day. Therefore, the facility would have adequate capacity to accommodate solid waste generated by the project.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No impact. The proposed project would comply with statutes and regulations related to solid waste. Waste generated by the proposed project would consist only of domestic refuse, which would be collected in approved trash bins and removed from the project site by a waste hauler or by the residents.

1.20 WILDFIRE

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX	. Wildfire.				
	he project located in or near state responsibility areas lands classified as high fire hazard severity zones?				
cla	ocated in or near state responsibility areas or lands ssified as very high fire hazard severity zones, would project:	⊠ Yes		No	
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?				
c)	Require the installation 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?				

Environmental Setting

The project site has been designated as a very high fire hazard by the State Department of Forestry and Fire Protection. The project site is also within a designated State Responsibility Area (SRA), which means that the State has fiscal responsibility for preventing and suppressing wildfires.

Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No impact. There would be no lane closures involved in the proposed project that would constrict emergency access or interfere with an 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?

Less than significant impact. The project site is located in an area that is susceptible to wildland fires. However, fires in the area have been extinguished quickly and contained to a relatively small area due to the conditions of the area. No conditions or factors have been identified in the project area that would exacerbate wildfire risks.

c) Require the installation 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?

No impact. No new infrastructure is proposed with approval of the project. However, future development of the resultant parcels may require the construction of roads, driveways, utilities, fire breaks, water storage, and other life safety infrastructure, which are requirements established through a variety of State and local regulations including California Public Resources Code 4290 and 4291. Though, the final design of these improvements have not been determined, the location and scope of improvements would be reviewed by local and State fire personnel prior to construction, through an entitlement action, and are not expected to exacerbate fire risk in the area.

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?

No impact. The geologic conditions of the project site (see discussion Section 1.7.f – Geology and Soils) preclude the possibility of landslides, downstream flooding or drainage changes, as a result of post-fire slope instability because of the site's underlying basalt conditions and lack of topsoil.

1.21 MANDATORY FINDINGS OF SIGNIFICANCE

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX	. Mandatory Findings of Significance.				
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 an endangered, rare, or threatened species, 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?				

Discussion

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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than significant impact with mitigation incorporated. The proposed project's impacts on biological resources and cultural resources were analyzed in this Initial Study, and all direct, indirect, and cumulative impacts were determined to have no impact, a less than significant impact, or reduced to a less than significant impact with implementation of mitigation. No special status species were identified in the proposed development areas. The development of the proposed project would not cause fish or wildlife populations to drop below self-sustaining levels or restrict the movement/distribution of a rare or endangered species because potential impacts to special-status species habitat would be mitigated to less than significant levels with the implementation of Mitigation Measure BIO-1 through BIO-5.

The development of the proposed project would not affect known historic, archaeological, or paleontological resources because implementation of Mitigation Measures CUL-1 and CUL-2 would ensure that appropriate steps are taken to avoid potential impacts all identified and unidentified resources. Additionally, the project applicant is required to comply with <u>California Code of Regulations (CCR) Section 15064.5(e)</u>, <u>California Health</u>

and Safety Code Section 7050.5, and Public Resources Code (PRC) Section 5097.98 as a matter of policy in the event human remains are encountered at any time. Adherence to Mitigation Measures CUL-1 and CUL-2, as well as regulations governing human remains, would reduce potential impacts to cultural and paleontological resources to less than significant with implementation of mitigation.

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.)

Less than significant impact with mitigation incorporated. The proposed project has either no impact, a less than significant impact, or a less than significant impact with mitigation incorporated with respect to all environmental issues pursuant to CEQA. Due to the limited scope of direct physical impacts on the environment associated with the proposed project, the project's impacts are primarily project-specific in nature.

The proposed project site is located within an area has been designated by the County for residential and agricultural uses. Short-term construction-related air quality impacts that would result from the construction of the site improvements and build-out of the resultant parcels will be reduced to less than significant levels with the implementation of Mitigation Measure AIR-1. Mitigation Measure GHG-1, identified in this Initial Study, would reduce potential impacts from the generation of greenhouse gas emissions to less than significant levels.

The cumulative effects resulting from the build-out of the Butte County General Plan 2030 were previously identified in the General Plan EIR. The type, scale, and location of the proposed project is consistent with County's General Plan and zoning designation and is compatible with the pattern of development on adjacent properties. Because of this consistency, the potential cumulative environmental effects of the proposed project would fall within the impacts identified in the County's General Plan EIR. Build-out of the resultant parcels is subject to required "fair share" development impact fees, which will be paid at the time of development.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less than significant impact with mitigation incorporated. There have been no impacts discovered through the review of this application demonstrating that there would be substantial adverse effects on human beings either directly or indirectly. However, the proposed project has the potential to cause both temporary and future impacts to the area by project-related impacts relating to air, biological, greenhouse gas emissions and cultural resources. With the implementation of mitigation measures included in this Initial Study, these impacts would be effectively mitigated to a less than significant level.

Authority for the Environmental Checklist: Public Resources Code Sections 21083, 21083.5.

Reference: Government Code Sections 65088.4.

Public Resources Code Sections 21080, 21083.5, 21095; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

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- 11. Butte County Public Works Department, Division of Waste Management. <u>Joint Technical Document-Neal Road Recycling and Waste Facility, Butte County, California.</u> November 2017.
- 12. California Department of Conservation. <u>Fault-Rupture Hazard Zones in California</u>. <u>Altquist-Priolo Earthquake Fault Zone Maps</u>. Special Publication 42. Interim Revision. 2007.
- 13. California Department of Conservation, Division of Land Resource Protection. <u>A Guide to the Farmland Mapping and Monitoring Program</u>. 2004.
- 14. California Department of Toxic Substance Control. 2009. *Envirostor Database*. Accessed on February 2019. http://www.envirostor.dtsc.ca.gov/public.
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- 16. California Department of Water Resources, Northern Region Office. <u>Geology of the Northern Sacramento Valley, California</u>. September 2014.

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Mitigation Measure AIR-1

The following best practice measures to reduce impacts to air quality shall be incorporated by the project applicant, subject property owners, or third-party contractors during construction activities on the project site. These measures are intended to reduce criteria air pollutants that may originate from the site during the course of land clearing and other construction operations.

<u>Diesel PM Exhaust from Construction Equipment and Commercial On-Road Vehicles Greater than 10,000 Pounds</u>

- All on- and off-road equipment shall not idle for more than five minutes. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the five-minute idling limit.
- · Idling, staging and queuing of diesel equipment within 1,000 feet of sensitive receptors is prohibited.
- All construction equipment shall be maintained in proper tune according to the manufacturer's specifications. Equipment must be checked by a certified mechanic and determined to be running in proper condition before the start of work.
- Install diesel particulate filters or implement other CARB-verified diesel emission control strategies.
- Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5 minutes at any location when within 100 feet of a restricted areas.
- To the extent feasible, truck trips shall be scheduled during non-peak hours to reduce perk hour emissions.

Operational TAC Emissions

- All mobile and stationary Toxic Air Contaminants (TACs) sources shall comply with applicable Airborne
 Toxic Control Measures (ATCMs) promulgated by the CARB throughout the life of the project (see
 http://www.arb.ca.gov/toxics/atcm/atcm.htm).
- Stationary sources shall comply with applicable District rules and regulations.

Fugitive Dust

Construction activities can generate fugitive dust that can be a nuisance to local residents and businesses near a construction site. Dust complaints could result in a violation of the District's "Nuisance" and "Fugitive Dust" Rules 200 and 205, respectively. The following is a list of measures that may be required throughout the duration of the construction activities:

- Reduce the amount of the disturbed area where possible.
- Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. An adequate water supply source must be identified. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible.
- All dirt stockpile areas should be sprayed daily as needed, covered, or a District approved alternative method will be used.

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- Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities.
- Exposed ground areas that will be reworked at dates greater than one month after initial grading should be sown with a fast-germinating non-invasive grass seed and watered until vegetation is established.
- All disturbed soil areas not subject to re-vegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the Butte County Air Quality Management District.
- All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with local regulations.
- Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site.
- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.
- Post a sign in prominent location visible to the public with the telephone numbers of the contractor and the Butte County Air Quality Management District - (530) 332-9400 for any questions or concerns about dust from the project.

All fugitive dust mitigation measures required should be shown on grading and building plans. In addition, the contractor or builder should designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend period when work may not be in progress. The name and telephone number of such persons shall be provided to the District prior to land use clearance for map recordation and finished grading of the area.

Please note that violations of District Regulations are enforceable under the provisions of California Health and Safety Code Section 42400, which provides for civil or criminal penalties of up to \$25,000 per violation.

Plan Requirements: The note shall be placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. This note shall also be placed on all building and site development plans.

Timing: Requirements of the condition shall be adhered to throughout all grading and construction periods.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Building inspectors shall spot check and shall ensure compliance on-site. Butte County Air Pollution Control District inspectors shall respond to nuisance complaints.

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Mitigation Measure BIO-1

Pre-construction protocol-level surveys shall be conducted during the appropriate survey window for the following species: *Butte County checkerbloom, Red Bluff dwarf rush*, and *Vernal pool fairy shrimp*. If any sensitive species will be impacted, as determined by a qualified biologist, the project either will be redesigned to avoid the population(s) to the maximum extent practicable or the species will be mitigated by the purchase of credits at an agency approved mitigation bank or other mitigation. For those populations to be fully avoided, the following measures shall be implemented:

- 1. During the planning stages of the project, the known populations in the project area will be included in the engineering drawings and all construction activities will be conducted to avoid the populations. Complete avoidance will be achieved by establishing and maintaining a 100-foot buffer for plant species, and 250-foot buffer for wetland species, and preventing any changes to on-site drainage patterns that could de-water or introduce water to known populations. However, a smaller buffer may be used if detailed topographic information shows that the local hydrology drains away from the wetlands and plants in question.
- 2. Prior to the start of construction activities within the project area, exclusionary fencing shall be erected around the buffer zones of the populations that will be completely avoided. If necessary, a qualified botanist shall be present to assist with locating known populations. The exclusionary fencing shall be periodically inspected throughout each period of construction and be repaired as necessary. All pedestrian and vehicular entry into the completely avoided areas delineated by the fencing shall be prohibited during construction.

If complete avoidance of a population of the federally, state or CNPS ranked species is not feasible, then a species-specific determination will be made by CDFW for state only listed species and by CDFW and USFWS for jointly listed species and the County and CDFW for CNPS ranked species as to the appropriate mitigation measures to be employed. These measures will likely include habitat preservation at a ratio of 2:1 (mitigation area to impacted area). Note that preservation requirements are not additive for each species present (i.e., an area occupied by one listed-plant species requires that same amount of habitat preservation as an equivalent area occupied by two or more listed plant species). Before impacting a state-listed species, the project proponent will need to obtain an incidental take permit pursuant to California Fish and Game Code Section 2081(b). For jointly listed plant species CDFW may issue a consistency determination pursuant to Fish and Game Code Section 2080.1 provided that the terms of the federal biological opinion and/or incidental take statement will minimize and fully mitigate the impacts of the taking. Restoration and protection of habitat shall be the focus of mitigation efforts for impacts to listed species; however, measures may also include salvaging the seeds of the plants with subsequent replanting in nearby suitable habitat. A detailed restoration and monitoring plan will be developed by a qualified botanist and will contain, at a minimum, the following information:

- 1. Location of areas on- or off-site to restore plant populations.
- 2. A description of the propagation and planting techniques to be employed in the restoration effort.
- 3. A timetable for implementation of the restoration plan.
- 4. A monitoring plan and performance criteria.
- 5. A description of remedial measures to be performed if initial restoration measures are unsuccessful in meeting the performance criteria.

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6. A description of site maintenance activities to occur after restoration activities (e.g., weed control, irrigation, and control of herbivory by livestock and wildlife).

Plan Requirements: The mitigation shall be placed on a separate document that is to be recorded concurrently with the map or on an additional map sheet.

Timing: Requirements of the condition shall be adhered to before construction activities, and throughout all grading and construction periods.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Department of Development Services shall ensure the measure is met at the time of development and during construction activities.

Mitigation Measure BIO-2

To minimize impacts to bat species protected by the California Fish and Game Code (CFGC), the following are recommended avoidance and minimization measures:

• If mature trees are removed and/or fallen, activities should be conducted between September 16 and March 15, outside of the bat maternity seasons. Trees shall also be removed at dusk to minimize impacts to roosting bats.

Plan Requirements: The mitigation shall be recorded on an additional map sheet to the Parcel Map, and noted on future development and grading plans.

Timing: Requirements of the condition shall be adhered to prior and throughout all grading and construction periods.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is recorded on an additional map sheet of the Parcel Map, and noted on future development and grading plans. Department of Development Services shall ensure the condition is met at the time of development and during construction activities.

Mitigation Measure BIO-3

If project construction activities, including ground disturbance or vegetation removal, occur during the nesting season for birds protected under the Migratory Bird Treaty Act (MBTA) and California Department Fish & Game Code (CDFC) (approximately February 1 – August 31), the project proponent shall retain a qualified biologist to perform preconstruction surveys for nesting bird species. Surveys to identify active bird nests shall be conducted within and 250 feet around the footprint of the proposed construction site. The survey shall be conducted within 7 days prior to the initiation of construction activities. If an active nest is observed, a species protection buffer shall be established. The species protection buffer will be defined by the qualified biologist based on the species, nest type and tolerance to disturbance. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored by a qualified biologist once per week and a report submitted to the Butte County Department of Development Services.

Plan Requirements: Perform protocol-level surveys for migratory birds protected by the California Department Fish & Game Code and the Migratory Bird Treaty Act. This measure shall be recorded on an additional map sheet to the Parcel Map.

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Timing: Requirements of the condition shall be adhered to prior to and during construction activities planned to occur during nesting seasons for CDFC and MBTA species (between February 1 and August 31).

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is recorded as an additional map sheet of the Parcel Map. Department of Development Services shall ensure the condition is met at the time of construction activities.

Mitigation Measure BIO-4

Place the following note to be recorded on an additional map page of the Parcel Map that states:

Prior to any development activity or the issuance of any permit or approval removing or encroaching upon oak trees on the project site (this generally includes the canopy drip-line of trees within the area of ground disturbance and trees subject to changes in hydrologic regime), the applicant/developer shall complete one of the following measures to the satisfaction of the Director of Development Services or his/her designee:

- A. An Oak Tree Evaluation Plan shall be prepared by a qualified professional having experience in California Oak Woodlands and is either a certified arborist, qualified wildlife biologist or registered professional forester shall be submitted for review and approval by the Director of Development Services or his/her designee that includes the following:
 - 1) A survey showing the location of oak trees 5 inches or more in diameter at breast height, as defined by PRC §21083.4(a);
 - 2) The removal of all oak trees 5 inches or more in diameter at breast height shall be mitigated. It shall be mitigated by one or more of the following: replanting and maintaining oak trees, establishing conservation easements, contributing funds for off-site oak woodlands conservation, and/or other mitigation measures developed by Butte County. Replanting oak trees cannot account for more than one-half of the mitigation. Replanted oak trees shall be maintained for seven years after they are planted. If any of the replanted oak trees die or become diseased, they shall be replaced and maintained for seven years after the new oak trees are planted;
 - 3) A replanting schedule and diagram for trees removed or encroached upon by permit activities consistent with PRC §21083.4(b)(2), applicable mitigation measures, and Butte County Ordinance, if any, shall be submitted to and approved by the Director of Development Services or his/her designee. Replanted trees shall be planted in areas deemed appropriate by the Plan, considering future lot development, interference with foundations, fencing, roadways, driveways, and utilities. Trees planted shall be protected from livestock and other animals;
 - 4) Oak Tree protection measures for trees to be retained within the project site shall be included in construction specifications. Prior to construction or surface disturbance, a protective fence or brightly colored staked boundary shall be placed 5 feet beyond the established critical rooting zone (CRZ) of the oak or group of oaks being protected. A warning sign shall be prominently displayed on each fence. The sign should be a minimum of 16 x 24 inches, brightly colored and be visible, even from vehicles. The sign must indicate that the CRZ is a restricted area. Orange safety triangles may suffice if other signage cannot be constructed. A high visibility plastic mesh fence is recommended to maximize the visibility of protected tree areas. Wire with bright-colored flags placed at equal intervals can also be a suitable barrier so long as it maintains high visibility. Protective fencing shall remain in place until final inspection by the qualified professional. No vegetation removal, soil disturbance, or

Carole Kelly Lotti Tentative Parcel Map (TPM18-0006)

- other development activities shall occur within the tree zone to protect root systems and minimize compaction of the soil, unless authorized by Oak Tree Mitigation Plan; and
- 5) Conservation easements or funds for off-site oak woodlands conservation shall be proposed to and approved by the Director of Development Services or his/her designee; or
- B. Provide proof of compliance with the adopted Butte County Oak Woodland Mitigation Ordinance currently under preparation; or
- C. Provide proof of compliance with all required avoidance and minimization measures, and payment of all applicable fees to mitigate for blue oak woodland impacts as provided in the Butte Regional Conservation Plan, as adopted by Butte County.

Plan Requirements: No vegetation removal, grading, road construction, or other earthwork resulting in the removal or encroachment upon oak trees on the project site shall be permitted until the mitigation measure is satisfied by the applicant/developer completing one of the specified measures to the satisfaction of the Director of Development Services or his/her designee.

Timing: Requirements of the condition shall be satisfied prior to any development activity or the issuance of any grading, building, septic, or well permit, or the approval of any improvement plans on the parcels.

Monitoring: The Butte County Department of Development Services and Department of Public Works shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. At the time of septic, well, or building permit application, the Development Services Department will reference this requirement on any grading, building, septic, or well permit site plans and verify that an Oak Tree Mitigation Plan has been submitted to and approved by the Director of Development Services or his/her designee. Butte County building inspectors shall ensure compliance on-site.

Mitigation Measure BIO-5

Place the following note to be recorded on an additional map page of the Parcel Map that states:

Before any development activity or the issuance of any permit or approval that would result in ground disturbing activity, wetland features including drainage channels within the project site shall be mapped utilizing approved methodologies to determine the nature and extent of each feature. A minimum 50-foot development avoidance 'No Disturbance' buffer shall be established around the outer edge of on-site wetland features unless a larger buffer area is required due to the presence of federally, state or CNPS ranked species. Wetland features and the development avoidance buffer area shall be mapped in the engineering drawings of development plans. If future construction activities on the resultant parcels would affect the identified wetland features or buffer area, the project proponent shall either obtain appropriate permits from federal and State agencies, pursuant to Section 404 of the Clean Water Act, or obtain a letter from the agencies that states the areas of disturbance is in compliance with the applicable regulations.

Mitigation requirements for the fill of waters of the U.S. will be implemented through an onsite restoration plan, and/or an In Lieu Fund and/or a certified conservation bank with a Service Area that covers the proposed Project area. These agreements, certifications, and permits may be contingent upon successful completion of the CEQA process.

Plan Requirements: Wetland features, including drainage channels, shall be surveyed by a qualified biologist. A minimum 50-foot development avoidance buffer area shall be established around the wetland feature. This mitigation shall be noted on a separate document recorded concurrently with the parcel map.

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Timing: Requirements of the condition shall be satisfied before any development activity or the issuance of any grading, building, septic, or well permit, or the approval of any improvement plans on the parcels.

Monitoring: The Butte County Department of Development Services and Department of Public Works shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Department of Development Services shall ensure the condition is met at the time of development and during construction activities.

Mitigation Measure CUL-1

If grading activities reveal the presence of prehistoric or historic cultural resources (i.e., artifact concentrations, including arrowheads and other stone tools or chipping debris, cans glass, etc.; structural remains; human skeletal remains) work within 50 feet of the find shall immediately cease until a qualified professional archaeologist can be consulted to evaluate the find and implement appropriate mitigation procedures. If human skeletal remains are encountered, State law requires immediate notification of the County Coroner (530.538.7404). If the County Coroner determines that the remains are in an archaeological context, the Native American Heritage Commission in Sacramento shall be notified immediately, pursuant to State Law, to arrange for Native American participation in determining the disposition of such remains. The provisions of this mitigation shall be followed during the construction of all subdivision improvements, including land clearing, road construction, utility installation, and building site development.

Plan Requirements: This note shall be placed on a separate document that is to be recorded concurrently with the map or on an additional map sheet and shall be shown on all site development and building plans.

Timing: This measure shall be implemented during all site preparation and construction activities.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Should cultural resources be discovered, the landowner shall notify the Planning Division and a professional archaeologist. The Planning Division shall coordinate with the developer and appropriate authorities to avoid damage to cultural resources and determine appropriate action. State law requires the reporting of any human remains.

Mitigation Measure CUL-2

Prior to ground disturbing activities, or prior to issuance of development permits, the project proponent shall present a final proposal identifying the location of the proposed activities to the Butte County Department of Development Services (DDS) for review and approval. The location of the proposed development activities shall not be located within 50 feet of identified archaeological resources (GE-19005 and GE-19006), which shall be verified through consultation with Butte County DDS and/or a qualified archaeologist. If activities will be within 50 feet, the project proponent shall install exclusion fencing around eligible or potentially-eligible cultural resources, and proposed activities shall be monitored by a qualified archaeologist during initial ground disturbing activities to avoid disturbance of the cultural resources. If avoidance is not possible, further archaeological testing of the resources and consultation with the Native American Community is recommended, prior to any project-related ground disturbing activities.

Plan Requirements: This note shall be placed on a separate document which is to be recorded concurrently with the map, and on an additional map sheet recorded with the map. This note shall be shown on all site development and building plans.

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Timing: This measure shall be implemented prior to all ground disturbing activities and prior to the issuance of development permits.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure the note is placed on a separate document which is to be recorded concurrently with the map and on an additional map sheet. The project proponent shall notify the Department of Development Services-Planning Division and/or a professional archaeologist to ensure proposed activities will avoid damage to eligible and/or potentially-eligible cultural resources.

Mitigation Measure GHG-1

The project proponent shall implement the following measures during construction-related activities and at the time of development to offset the anticipated contribution of greenhouse gas emissions:

- Prewire all new residential development to support photovoltaic system installation.
- Install electrical vehicle outlets on external walls or in garages in all new residential development.
- Minimize equipment idling time during construction activities either by shutting equipment off when
 not in use or reducing the time of idling to no more than 3 minutes.
- Use clean or alternative fuel equipment during construction-related activities to improve fuel efficiency.

Plan Requirements: The measure shall be placed on an additional map sheet which is to be recorded with the Parcel Map. This note shall also be placed on all building and site development plans.

Timing: Shall be implemented prior to issuance of building permits for residential development, Construction-related measures shall be adhered to throughout all grading and construction periods.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the measure is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Planning Division will ensure that future residential development includes the applicable measures during Building Permit review. Building inspectors shall spot check and shall ensure compliance on-site.

Project Sponsor(s) Incorporation of Mitigation into Proposed Project

I/We have reviewed the Initial Study for the <u>Carole Kelly Lotti Tentative Parcel Map (TPM18-0006)</u> application and particularly the mitigation measures identified herein. I/We hereby modify the applications on file with the Butte County Planning Department to include and incorporate all mitigations set forth in this Initial Study.

Keely Loth.	3-10.20
Project Sponsor/Project Agent	Date
 Project Sponsor/Project Agent	- Date





Aquatic and Terrestrial Wildlife, and Botanical Resources

Cohasset Tentative Parcel Map (18-0006)

Butte County, California



January 2019

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BIOLOGICAL RESOURCE ASSESSMENT

Cohasset Tentative Parcel Map (18-0006)

Project Location:

Butte County, California Sec 13, T 22N, R 1E

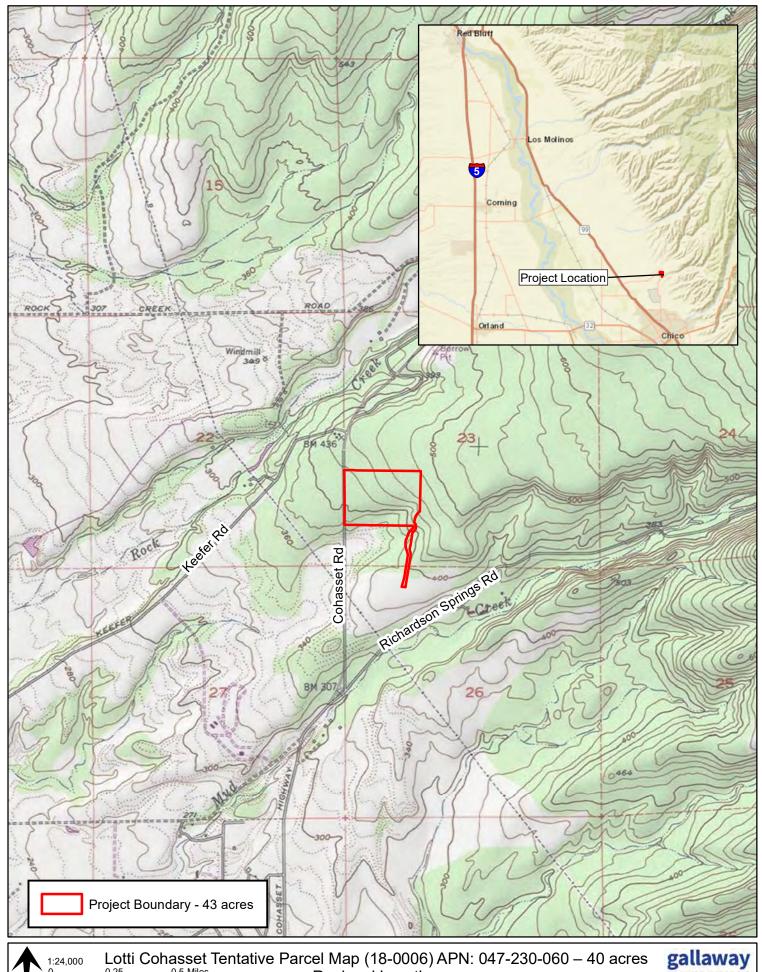
INTRODUCTION

Purpose and Overview

The purpose of this biological resource assessment (BRA) is to document the current endangered, threatened, sensitive and rare species, and their critical habitats that occur in the biological survey area (BSA) of the Cohasset Tentative Parcel Map 18-0006 (Project) site (APN: 047-230-060) located on the east side of Cohasset Road, northwest of Indian Cliffs Drive in unincorporated Butte County just north of Chico, California (Figures 1 and 2). A site visit was conducted within the approximately 40-acre BSA on January 21, 2019 by Gallaway Enterprises. The BSA is the limits of where Project disturbance is expected to occur (Figure 2). Primary references consulted include species lists and information gathered using United States Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPAC), California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) list of rare and endangered plants, literature review, and results of the January field visit. The results of the BRA are the findings of special-status species that occur or have potential to occur in the BSA. Recommendations for mitigation, avoidance and minimization measures are provided.

Project Location and Environmental Setting

The BSA is located on the east side of Cohasset Road north of Chico in unincorporated Butte County, California, Latitude 39.83029°, Longitude -121.84217°, within the USGS "Richardson Springs, CA" Quadrangle, Section 23, Township 23N, Range 1E (Figure 1). The BSA is located in the Northern Central Valley of California. The BSA is characterized by blue oak woodland habitat with a small rural residential home located in the approximate center of the BSA and asphalt and dirt access roads throughout the site. Open land and rural residential homes surround the BSA (Figure 2). The habitat types within the BSA consist of blue oak woodlands with small patches of annual grassland. The topography within the site is rolling with slopes ranging from 0-50 percent. The soil within the BSA consists of gravelly loams, and gravelly clay loams with occasional rock outcroppings. The average annual rainfall is 26.61 inches and the annual temperature is 61.15° F (US Climate Data 2018).



USGS



150

Lotti Cohasset Tentative Parcel Map (18-0006) APN: 047-230-060 – 40 acres
Biological Survey Area

Figure 2

gallaway ENTERPRISES

Project Description

The Project involves the approval of a tentative parcel map within the BSA.

Biological Survey Area

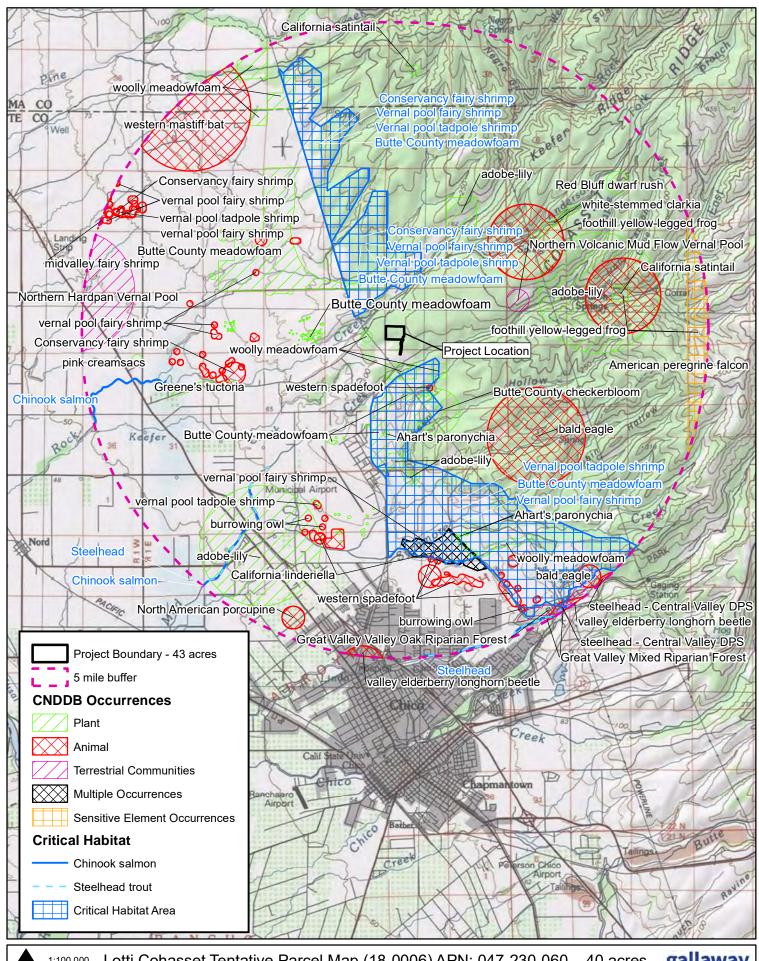
The BSA is the area where the focus of biological surveys is conducted. The BSA is confined to the approximately 40 acres identified in the tentative parcel map (**Figure 2**). Habitats within the BSA consist of blue oak woodland with patches of annual grassland.

METHODS

References Consulted

Gallaway Enterprises obtained lists of special-status species that occur in the vicinity of the BSA. The CNDDB Geographic Information System (GIS) database was also consulted and showed special-status species within a five (5) mile radius of the BSA (**Figure 3**). Other primary sources of information regarding the occurrence of federally listed threatened, endangered, purposed and candidate species, and their habitats within the BSA used in the preparation of this BRA are:

- The USFWS IPaC Resources list for the BSA, January 29, 2019 (Appendix A; Species Lists);
- The results of a species record search of the CDFW CNDDB, RareFind 5, for the 7.5 minute USGS
 "Richardson Springs, CA" quadrangle and 8 surrounding quadrangles (Appendix A; Species
 Lists);
- The review of the CNPS Inventory of Rare and Endangered Vascular Plants of California for the 7.5 minute USGS "Richardson Springs, CA" quadrangle and 8 surrounding quadrangles (Appendix A; Species Lists);
- USFWS Critical Habitat Portal, January 29, 2019;
- Gallaway Enterprises results from a general habitat assessment conducted on January 21, 2019.



GE: #18-106 Map Date: 01/07/19

Critical Habitat

The ESA requires that critical habitat be designated for all species listed under the ESA. Critical habitat is designated for areas that provide essential habitat elements that enable a species survival and which are occupied by the species during the species listing under the ESA. Areas outside of the species range of occupancy during the time of its listing can also be determined as critical habitat if the agency decides that the area is essential to the conservation of the species.

The USFWS Critical Habitat Portal was accessed to determine if critical habitat occurs within the BSA. Appropriate Federal Registers were also used to confirm the presence or absence of critical habitat.

Waters of the United States

During the January 21, 2019 site visit, the BSA was surveyed to determine if jurisdictional wetlands occur. Multiple potentially jurisdictional wetlands were observed within the BSA. Wetlands observed included vernal pools, seasonal wetlands and swales. Photographs of the BSA are provided in **Appendix C**.

Biological and Botanical Surveys

A habitat assessment and general botanical inventory were conducted by Gallaway Enterprises senior botanist Elena Gregg to determine the presence of special-status species and their habitats within the BSA.

Habitat Assessment

A habitat assessment of the BSA was conducted on January 21, 2019. The purpose of the habitat assessment is to determine if suitable habitat occurs within the BSA for special-status species. The habitat assessment was conducted by walking the entire BSA and recording specific habitat types and elements. If habitat was observed for special-status species is was then evaluated for quality based on vegetation composition and structure, physical features (e.g. soils, elevation), micro-climate, surrounding area, presence of predatory species and available resources (e.g. prey items, nesting substrates).

General Botanical Survey

A general botanical inventory and habitat survey was conducted on January 21, 2019. The purpose of the botanical survey is to determine the presence of suitable habitat elements for special-status species that were not blooming during the time of the survey. The survey was conducted by walking in all areas of the BSA and taking inventory of observed botanical species and habitat elements.

RESULTS

Habitat Types

The dominant habitat within the BSA is annual grassland, with a number of wetlands scattered throughout the site. A few scattered trees were located along the southern and eastern boundaries of the BSA, but did not constitute a distinct habitat type.

Blue Oak-Foothill Pine

Blue Oak-Foothill Pine is the dominant vegetation community within the BSA. Common species observed within the BSA were blue oak (*Quercus douglasii*), foothill pine (*Pinus sabiniana*) and a few live oak (*Quercus wislizeni*) with an understory ranging from patches of dense buckbrush (Ceanothus cuneatus) to an herbaceous dominated understory composed of annual grasses and forbs. Boulders and large cobble were prevalent within the understory. Some other species observed were foothill honeysuckle (*Lonicera interrupta*) and poison oak (*Toxicodendron diversilobum*). The Blue Oak-Foothill Pine habitat type provides foraging ground for a variety of wildlife species and breeding habitat for reptiles and mammals including bats and nesting birds.

Annual Grassland

Annual grassland occurs in between the blue oak-foothill pine habitat within the BSA. Boulders and large cobble were found scattered throughout much of the annual grassland habitat. The annual grassland within the BSA consisted mostly of annual grasses and forbs, such as yellow-star thistle (*Centaurea solstitialis*), medusahead (*Elymus caput-medusae*), soft chess (*Bromus hordeaceus*), Italian ryegrass (*Festuca perennis*), long-beaked stork's-bill (*Erodium botrys*), wild oats (*Avena* spp.), and a variety of clovers (*Trifolium* spp.). Wildlife species use grassland habitat for foraging but often require some other habitat characteristic such as rocky out crops, cliffs, mammal burrows, caves, or ponds in order to breed and find shelter for escapement (Mayer and Laudenslayer 1988). Common species that are found breeding in this habitat include a variety of ground nesting avian species and small mammals.

Wetlands

Scattered within the BSA are numerous seasonal and vernal wetlands and swales. Seasonal wetlands are non-tidal depressional wetlands classified under the palustrine system. They tend to stay wet or ponded into late spring or early summer months and are typically dominated by generalist wetland plants and emergent wetland plants. Vernal pools are similar depressional features that are formed where a shallow hardpan prevents water from draining down though the soil. Vernal pools are typically dominated by vernal pool endemic plant species and tend to dry down sooner than seasonal wetlands. Swales are low drainage pathways that typically connect to and help feed wetland or other water features. Aquatic wildlife species typically found in wetlands include a variety of invertebrates and amphibians.

Riverine

Riverine habitat is distinguished by intermittent or continually running water. There are a few ephemeral drainages present within the BSA. Ephemeral drainages do not convey water year round. They dry up seasonally and play an important role of conveying and filtering seasonal runoff into larger perennial riverine systems. The drainages present within the BSA contained mud or gravel bottoms.

Barren

Barren habitat is typified by non-vegetated soil, rock, and gravel. Only a small percentage of the BSA contains barren habitat. There is one paved/gravel road within the BSA and a few unpaved, dirt roads throughout the BSA that are functional for transportation. The barren habitat type provides low quality habitat to wildlife.

Sensitive Natural Communities

There are no sensitive natural communities as identified by CDFW within the BSA.

Critical Habitat

There is no critical habitat within the BSA; however, critical habitat for Butte County meadowfoam (BCM, *Limnanthes floccosa ssp. californica*), vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*) is located within 1 mile to the north and south of the BSA (**Figure 3**).

Special-Status Species

Special-status species that have potential to occur in the BSA are those that fall into one of the following categories:

- Listed as threatened or endangered, or are proposed or candidates for listing under the California Endangered Species Act (CESA, 14 California Code of Regulations 670.5) or the Federal Endangered Species Act (ESA, 50 Code of Federal Regulations 17.12);
- Listed as a SSC by CDFW or protected under the California Fish and Game Code (i.e Fully Protected Species);
- Ranked by the CNPS as 1A, 1B, or 2;
- Protected under the Migratory Bird Treaty Act (MBTA);
- Protected under the Bald and Golden Eagle Protection Act; or
- Species that are otherwise protected under policies or ordinances at the local or regional level as required by the California Environmental Quality Act (CEQA, §15380).

The following special-status species have potential to occur within the BSA based on the presence of suitable habitat and/or known records of species occurrence within the vicinity of the BSA.

Endangered, Threatened and Rare Plants

Within the BSA a general botanical survey was conducted on January 21, 2019. Based on the habitats observed within the BSA during the field visit, the BSA contains suitable habitat for special-status plant species including Butte County checkerbloom and Red Bluff dwarf rush.

Butte County Checkerbloom

Butte County checkerbloom is ranked as a 1B.2 plant under the CNPS. Butte County checkerbloom is a rhizomatous plant with basal leaves and a tall flower raceme that produces pink flowers from April through June. Butte County checkerbloom occurs in the understory of oak woodlands and brushy slopes in and around rocky outcroppings and along ephemeral drainages and draws in the foothills of Butte County, particularly on the Tuscan Formation. Current threats to this species include loss of habitat due to residential development and fire suppression activities.

CNDDB Occurrences

There is one occurrence of Butte County checkerbloom (Occurrence # 46) within 2 miles to the south of the BSA. This occurrence was found on the Stone Ridge Ecological Reserve.

Status of Butte County checkerbloom occurring in the BSA

There is suitable habitat for Butte County checkerbloom throughout much of the BSA.

Red Bluff Dwarf Rush

Red Bluff dwarf rush is ranked as a 1B.1 plant under the CNPS. It is endemic to California and only occurs in the northern portion of the Central Valley and Sierra Nevada foothills. Red Bluff dwarf rush is a small annual, grasslike herb that blooms from March through May. It can be found within vernal pools and other moist, or mesic, areas with similar vernal hydrology. Current threats facing Red Bluff dwarf rush is loss of habitat, changes in hydrology and invasive species.

CNDDB Occurrences

There is one CNDDB occurrence of Red Bluff dwarf rush (Occurrence # 9) within 4 miles of the BSA. This occurrence is presumed to be extant, but was last observed in 1980.

Status of Red Bluff dwarf rush occurring in the BSA

There is sub-marginal habitat for Red Bluff dwarf rush within the wetlands present within the BSA due to the shallow nature of the features and the lack of observed associate plant species.

Endangered, Threatened and Special Status Wildlife

A habitat assessment was conducted within the BSA on January 21, 2019. Suitable habitat was identified for federally listed vernal pool fairy shrimp, state species of special concern pallid bat, and avian species that are protected under the Migratory Bird Treaty Act (MBTA).

Vernal Pool Fairy Shrimp

Vernal pool fairy shrimp are listed under the ESA as threatened. They are widespread but not abundant. Known populations occur in California to southern Oregon. The geographic range of this species encompasses most of the Central Valley from Shasta County to Tulare County and the central coast range from northern Solano County to Santa Barbra County, California: additional disjunctive occurrences have been identified in western Riverside County, California, and in Jackson County, Oregon, near the city of Medford. The vernal pool fairy shrimp occupies a variety of different vernal pool habitats, from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. Occupied habitats range in size from rock outcrops pools as small as one square meter to large vernal pools up to 12 acres. Smaller vernal pools are the most commonly occupied and are found more frequently in grass or mud bottomed swales, or basalt flow depression pools in unplowed grasslands (USFWS 2005).

CNDDB Occurrences

There are multiple CNDDB occurrences of vernal pool fairy shrimp (CNDDB occurrence # 541 and 685) within 3 miles to the west/northwest of the BSA.

Status of Vernal Pool Invertebrates occurring in the BSA

There is marginal habitat for listed vernal pool fairy shrimp within the vernal and seasonal wetlands within the BSA. The wetlands within the BSA only provide marginal habitat due to the shallow nature of these features. Gallaway Enterprises has not been made aware of any previous protocol-level surveys conducted within the BSA for listed vernal pool invertebrates. As such, there is a moderate potential for vernal pool fairy shrimp to occur within the BSA.

Pallid Bat

Pallid bats are designated as a CDFW SSC. Pallid bats roost alone, in small groups (2 to 20 bats), or gregariously (100s of individuals). Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating Ponderosa pine and valley oak bark, deciduous trees in riparian areas, and fruit trees in orchards), and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings. Roosts generally have unobstructed entrances/exits, and are high above the ground, warm, and inaccessible to terrestrial predators. However, this species has also been found roosting on or near the ground under burlap sacks, stone piles, rags, and baseboards. Lewis 1996 found that pallid bats have low roost fidelity and both pregnant and lactating pallid bats changed roosts an average of once every 1.4 days throughout the summer. Overwintering roosts have relatively cool, stable temperatures and are located in protected structures beneath the forest canopy or on the ground, out of direct sunlight. In other parts of the species' range, males and females have been found hibernating alone or in small groups, wedged deeply into narrow fissures in mines, caves, and buildings. At low latitudes, outdoor winter activity has been reported at temperatures between –5 and 10 °C.

CNDDB Occurrences

There are no recorded occurrences of Pallid bats within 5 miles of the BSA.

Status of Pallid Bats occurring in the BSA

Mature trees within the BSA that have suitable habitat elements (e.g. cavities, peeling bark) may provide suitable day roost habitat. There is moderate potential for pallid bats to occur within the BSA.

Migratory Birds and Raptors

Nesting birds are protected under the MBTA (16 USC 703) and the CFGC (3503). The MBTA (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations prescribed by the USFWS. The bird species covered by the MBTA includes nearly all of those that breed in North America, excluding introduced (i.e. exotic) species (50 Code of Federal Regulations §10.13). Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance have the potential to affect bird species protected by the MBTA.

The CFGC (§3503.5) states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (owls) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFGC (§3503) also states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto."

CNDDB Occurrences

The majority of migratory birds and raptors protected under the MBTA and CFGC are not recorded on the CNDDB because they are abundant and widespread.

Status of Migratory Birds and Raptors occurring in the BSA

There is suitable nesting habitat for a variety of ground, shrub and tree nesting avian species within the BSA. The BSA contains annual grassland habitat and a few scattered trees and shrubs; however, within the eastern portion of the BSA, there is a high level of disturbance due to horse grazing. Therefore, in the eastern portion of the BSA, the potential for ground nesting avian species to nest is limited.

Other Special-Status Species

The following special-status species were identified under the USFWS species list, CNDDB, and the CNPS list of rare and endangered plants as having potential to occur within the vicinity of the BSA and/or recorded observations within or within close proximity of the BSA. Not all special-status species listed under federal and state species lists are discussed due to unsuitable habitat or lack of observations in the area. A summary of special-status species listed on the USFWS species list, CNDDB, and the CNPS list of rare and endangered plants within the "Richardson Springs, CA" USGS 7.5 minute quadrangle, and their potential to occur within the BSA is described in **Table 1**.

Table 1. Special-status species and their potential to occur in the Cohasset Tentative Parcel Map (18-0006) Project BSA.

Common Name (Scientific Name)	<u>Status</u> Fed/State/CNPS	Associated Habitats	Potential for Occurrence
SENSITIVE NATURAL O	COMMUNITIES		
None. No Sensitive Na	tural Communities	occur or are mapped as occurring	g within the BSA.
PLANTS			
Adobe Lily (Fritillaria pluriflora)	_/_/1B.1	Adobe or heavy clay soils in valley foothill grasslands. (Blooming Period (BP): February - April)	None. There are no suitable soils within the BSA.
Ahart's Paronychia (Paronychia ahartii)	_/_/1B.1	Open areas in cismontane woodland, valley/foothill grasslands, and vernally mesic areas. (BP: April - July)	None. There is no suitable open habitat within the BSA.
Butte County Checkerbloom (Sidalcea robusta)	_/_/1B.2	Chaparral and cismontane woodlands, often associated with ephemeral drainages and rock outcroppings. (BP: April-June)	High. The oak woodland within the BSA provides suitable habitat for this species.
Butte County Meadowfoam (Limnanthes floccosa ssp. californica)	FE/SE/1B.1	Vernal pools and swales in valley foothill grasslands. (BP: March - May)	None. The vernally wet features within the BSA do not contain suitable soils.
Flagella-like Atractylocarpus (Campylopodiella stenocarpa)	_/_/2B.2	Rotten logs, stumps and bases of trees in cismontane woodlands (above 328 feet in elevation).	None. Not observed within the BSA.
Red Bluff Dwarf Rush (Juncus leiospermus var. leiospermus)	_/_/1B.1	Chaparral, cismontane woodland, meadows and seeps, valley/foothill grassland and vernal pools/vernally mesic habitats. (BP: March-May)	Moderate. The vernally wet features provide marginal habitat within the BSA.
Slender Orcutt Grass (Orcuttia tenuis)	FT/SE/1B.1	Vernal pools, typically deep (BP: May - October)	None. There is no suitable deep vernal habitat within the BSA.

Common Name (Scientific Name)	<u>Status</u> Fed/State/CNPS	Associated Habitats	Potential for Occurrence
INVERTEBRATES			
Conservancy Fairy Shrimp (Branchinecta conservatio)	FE/_/_	Moderately turbid, deep, coolwater vernal pool.	None. The BSA is not within suitable soils and the wetlands are not deep or turbid enough for this species.
Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus)	FT/_/_	Blue elderberry shrubs usually associated with riparian areas.	None. No elderberry shrubs were observed within the BSA.
Vernal Pool Fairy Shrimp (Branchinecta lynchi)	FT/_/_	Vernal pools and swales.	Moderate. There is marginal habitat within the vernally wet features within the BSA and the BSA is in close proximity to known occurrences of this species.
Vernal Pool Tadpole Shrimp (Lepidurus packardi)	FE/_/_	Deep vernal pools.	None. The vernally wet features within the BSA do not support suitably deep habitat.
REPTILES AND AMPHI	BIANS		
Foothill Yellow- legged Frog (Rana boylii)	_/SC,SSC/_	Streams with consistent flow, slow side waters with cobble and boulders for oviposition.	None. The BSA does not contain suitable habitat for this species.
Giant Garter Snake (Thamnophis gigas)	FT/ST/_	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes ponds, sloughs, small lakes, and there associated uplands. (sea level - 400 ft elevation)	None. The BSA does not contain suitable habitat for this species.
Western spadefoot (Spea hammondii)	_/ssc/_	Slow moving waters, ponds, marshes, and vernal pools.	None. The BSA does not contain suitable habitat for this species.

Common Name (Scientific Name)	<u>Status</u> Fed/State/CNPS	Associated Habitats	Potential for Occurrence
FISH			
None. There are no dr	ainages and no suit	able habitat for fish species withi	n the BSA.
BIRDS			
Bald Eagle (Haliaeetus leucocephalus)	_/SE/FP	Coast, large lakes and river systems, with open forests with large trees and snags.	None. There is no suitable nesting habitat or suitable foraging habitat within the BSA.
Swainson's Hawk (Buteo swainsoni)	_/ST/_	Open grasslands, shrublands and agricultural fields, often near riparian forests.	Low. There are potential nest trees present but no active nests occur within 10 miles and no suitable foraging habitat is present.
Western Burrowing Owl (Athene cunicularia)	MBTA/SSC/_	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Low. The rock outcrops and rock walls provide submarginal habitat within the BSA.
MAMMALS			
Pallid bat (Antrozous pallidus)	_/SSC/_	Rocky outcroppings to open, sparsely vegetated grasslands with nearby water source. Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., cavities and exfoliating bark), and various human structures (i.e. bridges).	Moderate. Mature trees with exfoliating bark and cavities within the BSA provide potential day roosting habitat.
Western red bat (Lasiurus blossevillii)	_/SSC/_	Riparian areas dominated by walnuts, oaks, willows, cottonwoods, and sycamores where they roost in these broad-leafed trees.	None. Western red bats are known to roost on oak trees, but are generally only found in riparian areas which are not present in the BSA.

CODE DESIGNATIONS			
FE = Federally-listed Endangered	SNC = CDFW Sensitive Natural Community		
FT = Federally-listed Threatened			
FC = Federal Candidate Species	CRPR 1B = Rare or Endangered in California or		
BCC = Federal Bird of Conservation Concern	elsewhere		
MBTA = Protected by the federal Migratory Bird Treaty Act	CRPR 2 = Rare or Endangered in California, more		
	common elsewhere		
SE = State-listed Endangered	CRPR 3 = More information is needed		

ST = State-listed Threatened	CRPR 4 = Plants with limited distribution	
SR = State-listed Rare		
SSC = State Species of Special Concern	0.1 =Seriously Threatened	
	0.2 = Fairly Threatened	
FP =CDFW Fully Protected Species	0.3 = Not very Threatened	

Potential for Occurrence: for plants it is considered the potential to occur during the survey period; for birds and bats it is considered the potential to breed, forage, roost, over-winter, or stop-over in the BSA during migration. Any bird or bat species could fly over the BSA, but this is not considered a potential occurrence. The categories for the potential for occurrence include:

<u>None:</u> The species or natural community is known not to occur, and has no potential to occur in the BSA based on sufficient surveys, the lack suitable habitat, and/or the BSA is well outside of the known distribution of the species. <u>Low:</u> Potential habitat in the BSA is sub-marginal and/or the species is known to occur in the vicinity of the BSA. <u>Moderate:</u> Suitable habitat is present in the BSA and/or the species is known to occur in the vicinity of the BSA. Pre-construction surveys may be required.

<u>High:</u> Habitat in the BSA is highly suitable for the species and there are reliable records close to the BSA, but the species was not observed. Pre-construction surveys required.

Known: Species was detected in the BSA or a recent reliable record exists for the BSA.

REGULATORY FRAMEWORK

The following describes federal, state, and local environmental laws and policies that may be relevant if the BSA were to be developed or modified.

Federal

Federal Endangered Species Act

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect species that are endangered or threatened with extinction. The ESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

Under the FESA, species may be listed as either "endangered" or "threatened." Endangered means a species is in danger of extinction throughout all or a significant portion of its range. Threatened means a species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. All species of plants and animals, except non-native species and pest insects, are eligible for listing as endangered or threatened. The USFWS also maintains a list of "candidate" species. Candidate species are species for which there is enough information to warrant proposing them for listing, but that have not yet been proposed. "Proposed" species are those that have been proposed for listing, but have not yet been listed.

The FESA makes it unlawful to "take" a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures

wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering."

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations prescribed by the USFWS. The bird species covered by the MBTA includes nearly all of those that breed in North America, excluding introduced (i.e. exotic) species (50 Code of Federal Regulations §10.13). Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance has the potential to affect bird species protected by the MBTA. Thus, vegetation removal and ground disturbance in areas with breeding birds should be conducted outside of the breeding season (February 1 - August 31). If vegetation removal or ground disturbance activities are conducted during the breeding season, then a qualified biologist must determine if there are any nests of bird species protected under the MBTA present in the construction area prior to commencement of construction. If active nests are located or presumed present, then appropriate avoidance measures (e.g. spatial or temporal buffers) must be implemented.

State of California

Clean Water Act, Section 401 and 402

The Clean Water Act (§401) requires water quality certification and authorization for placement of dredged or fill material in wetlands and Other Waters of the United States. In accordance with the Clean Water Act (§401), criteria for allowable discharges into surface waters have been developed by the State Water Resources Control Board, Division of Water Quality. The resulting requirements are used as criteria in granting National Pollutant Discharge Elimination System (NPDES) permits or waivers, which are obtained through the Regional Water Quality Control Board (RWQCB) per the Clean Water Act (§402). Any activity or facility that will discharge waste (such as soils from construction) into surface waters, or from which waste may be discharged, must obtain an NPDES permit or waiver from the RWQCB. The RWQCB evaluates an NPDES permit application to determine whether the proposed discharge is consistent with the adopted water quality objectives of the basin plan.

California Endangered Species Act

The California Endangered Species Act (CESA) is similar to the ESA, but pertains to state-listed endangered and threatened species. The CESA requires state agencies to consult with the CDFW when preparing documents to comply with the California Environmental Quality Act (CEQA). The purpose is to ensure that the actions of the lead agency do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species. In addition to formal listing under the federal and state endangered species acts, "species

of special concern" receive consideration by CDFW. Species of special concern are those whose numbers, reproductive success, or habitat may be threatened.

California Fish and Game Code (§3503.5)

The California Fish and Game Code (CFGC) (§3503.5) states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (all owls except barn owls) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto". Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFGC (§3503) also states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto".

Rare and Endangered Plants

The California Native Plant Society (CNPS) maintains a list of plant species native to California with low population numbers, limited distribution, or otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS California Rare Plant Rank (CRPR) plants receive consideration under CEQA review. The CNPS CRPR categorizes plants as follows:

- Rank 1A: Plants presumed extinct in California;
- Rank 1B: Plants rare, threatened, or endangered in California or elsewhere;
- Rank 2A: Plants presumed extirpated or extinct in California, but not elsewhere;
- Rank 2B: Plants rare, threatened, or endangered in California, but more numerous elsewhere;
- Rank 3: Plants about which we need more information; and
- Rank 4: Plants of limited distribution.

The California Native Plant Protection Act (CFGC §1900-1913) prohibits the taking, possessing, or sale within the state of any plants with a state designation of rare, threatened, or endangered as defined by CDFW. An exception to this prohibition allows landowners, under specific circumstances, to take listed plant species, provided that the owners first notify CDFW and give the agency at least 10 days to retrieve (and presumably replant) the plants before they are destroyed. Fish and Game Code §1913 exempts from the 'take' prohibition "the removal of endangered or rare native plants from a canal, lateral channel, building site, or road, or other right of way."

California Environmental Quality Act Guidelines §15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines §15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled based on the definition in the ESA and the section of the CFGC dealing

with rare, threatened, and endangered plants and animals. The CEQA Guidelines (§15380) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (e.g. candidate species, species of concern) would occur. Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

Local

SB 1334, The Oak Woodlands Conservation Act (Act)

The passage of SB 1334, The Oak Woodlands Conservation Act (Act), amended CEQA to require counties to determine if a project within their jurisdiction may result in a conversion of oak woodlands and have a significant effect on the environment. "Conversion" means cutting or removing 30 percent or more of the canopy from an oak woodland and changing its use.

CONCLUSIONS AND RECOMMENDATION

Endangered, Threatened and Rare Plants

Due to the potential for Butte County checkerbloom and Red Bluff dwarf rush to occur within the BSA, protocol-level surveys conducted by a qualified botanist for these species are recommended.

Endangered, Threatened and Special Status Wildlife

Vernal Pool Invertebrates

The wetlands within the BSA provide marginal habitat for vernal pool fairy shrimp. As such, unless protocol-level surveys are conducted to determine their presence or absence, vernal pool fairy shrimp should be assumed to be present. If protocol-level surveys are conducted, the protocol will require one wet-season survey and one dry-season survey. If vernal pool fairy shrimp are assumed to be present, mitigation will be required for the loss of species habitat. Section 7 consultation with the USFWS will be required.

Pallid Bats

To minimize impacts to bat species protected by the CFGC the following are recommended avoidance and minimization measures:

 Mature trees should be removed and/or fallen between September 16 – March 15 outside of the bat maternity season. Trees should be removed at dusk to minimize impacts to roosting bats.

Bird and Raptor Species

To avoid impacts to bird and raptor species, including Swainson's hawks, protected under the MBTA and the CFGC the following avoidance and minimization measures are recommended.

- 1. Any vegetation removal and initial ground disturbances should be conducted during the avian non-breeding season (September 1 January 31).
- 2. If vegetation removal or initial ground disturbances occur during the avian breeding season (February 1 August 31) then a migratory bird and raptor survey shall be conducted by a qualified biologist to identify any active nests within 250 feet of the BSA. A qualified biologist shall:
 - Conduct a survey for all birds protected by the MBTA and CFGC within seven (7) days prior to vegetation removal or initial ground disturbances (which ever activity comes first), and map all active nests located within 250 feet of the BSA where accessible;
 - Develop buffer zones around active nests. The qualified biologist shall determine appropriate species protections buffers around active nests based on the species tolerance of disturbance, species type, nest location and activities that will be conducted near the nest. Construction activities shall be prohibited within the buffer zones until the young have fledged or the nest fails. Active nests shall be monitored once per week or as necessary and a report submitted to the CEQA Lead Agency weekly or as necessary.
 - If construction activities stop for more than 15 days then another migratory bird and raptor survey shall be conducted within seven (7) days prior to the continuation of construction activities.

Tree Removal

If any trees with a diameter at breast height of 6 inches or greater are present within the BSA and proposed for removal, an inventory of the trees and health assessment performed by a qualified arborist will be required by the County. If the removal of any regulated oak woodland is proposed, a tree removal permit must be obtained from Butte County and mitigation for loss of oak trees per County requirements will be necessary.

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LIST OF PREPARERS

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Cate Davis, GIS Analyst and Cultural Resource Specialist. Master of Arts in Anthropology with a specialization in GIS applications and land use studies, California State University, Chico. Ms. Davis has over 4 years of experience working with GIS while incorporating surveying applications, analysis of datasets, and collection of field data in order to create professional quality graphics and reports.

Appendix A

Agency Species Lists

IPaC

U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Project information

NAME

Cohasset TPM

LOCATION

Butte County, California



DESCRIPTION

Tentative Parcel Map review

Local office

Sacramento Fish And Wildlife Office

\((916) 414-6600

(916) 414-6713

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- Log in to IPaC.
- 2. Go to your My Projects list.
- Click PROJECT HOME for this project.
- 4. Click REQUEST SPECIES LIST.

Listed species and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries 2).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.
- 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Reptiles

NAME STATUS

Giant Garter Snake Thamnophis gigas

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/4482

Threatened

Amphibians

NAME STATUS

California Red-legged Frog Rana draytonii

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/2891

Threatened

Fishes

NAME

Delta Smelt Hypomesus transpacificus

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/321

Threatened

Insects

NAME

Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/7850

Threatened

Crustaceans

NAME

Conservancy Fairy Shrimp Branchinecta conservatio

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/8246

Endangered

Vernal Pool Fairy Shrimp Branchinecta lynchi

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/498

Threatened

Vernal Pool Tadpole Shrimp Lepidurus packardi

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/2246

Endangered

Flowering Plants

Butte County Meadowfoam Limnanthes floccosa ssp. californica
There is final critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/4223

Slender Orcutt Grass Orcuttia tenuis
There is final critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/1063

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act^{1} and the Bald and Golden Eagle Protection Act^{2} .

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds
 http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds of Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ <u>below</u>.

This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found <u>below</u>.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

COM

NAME

BREEDING SEASON (IF A
BREEDING SEASON IS INDICATED
FOR A BIRD ON YOUR LIST, THE
BIRD MAY BREED IN YOUR
PROJECT AREA SOMETIME WITHIN
THE TIMEFRAME SPECIFIED,
WHICH IS A VERY LIBERAL
ESTIMATE OF THE DATES INSIDE
WHICH THE BIRD BREEDS ACROSS
ITS ENTIRE RANGE. "BREEDS
ELSEWHERE" INDICATES THAT THE
BIRD DOES NOT LIKELY BREED IN
YOUR PROJECT AREA.)

Bald Eagle Haliaeetus leucocephalus

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

https://ecos.fws.gov/ecp/species/1626

Breeds Jan 1 to Aug 31

Burrowing Owl Athene cunicularia

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9737

Breeds Mar 15 to Aug 31

California Thrasher Toxostoma redivivum

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

Common Yellowthroat Geothlypis trichas sinuosa

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084

Breeds May 20 to Jul 31

Costa's Hummingbird Calypte costae

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

https://ecos.fws.gov/ecp/species/9470

Breeds Jan 15 to Jun 10

Lewis's Woodpecker Melanerpes lewis

This is a Bird of Conservation Concern (BCC) throughout its range in

the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9408

Breeds Apr 20 to Sep 30

Nuttall's Woodpecker Picoides nuttallii

This is a Bird of Conservation Concern (BCC) only in particular Bird

Conservation Regions (BCRs) in the continental USA

https://ecos.fws.gov/ecp/species/9410

Breeds Apr 1 to Jul 20

Oak Titmouse Baeolophus inornatus

This is a Bird of Conservation Concern (BCC) throughout its range in

the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9656

Breeds Mar 15 to Jul 15

Rufous Hummingbird selasphorus rufus

This is a Bird of Conservation Concern (BCC) throughout its range in

the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/8002

Breeds elsewhere

Song Sparrow Melospiza melodia

This is a Bird of Conservation Concern (BCC) only in particular Bird

Conservation Regions (BCRs) in the continental USA

Breeds Feb 20 to Sep 5

Spotted Towhee Pipilo maculatus clementae

This is a Bird of Conservation Concern (BCC) only in particular Bird

Conservation Regions (BCRs) in the continental USA

https://ecos.fws.gov/ecp/species/4243

Breeds Apr 15 to Jul 20

Wrentit Chamaea fasciata

This is a Bird of Conservation Concern (BCC) throughout its range in

the continental USA and Alaska.

Breeds Mar 15 to Aug 10

Yellow-billed Magpie Pica nuttalli

This is a Bird of Conservation Concern (BCC) throughout its range in

the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9726

Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

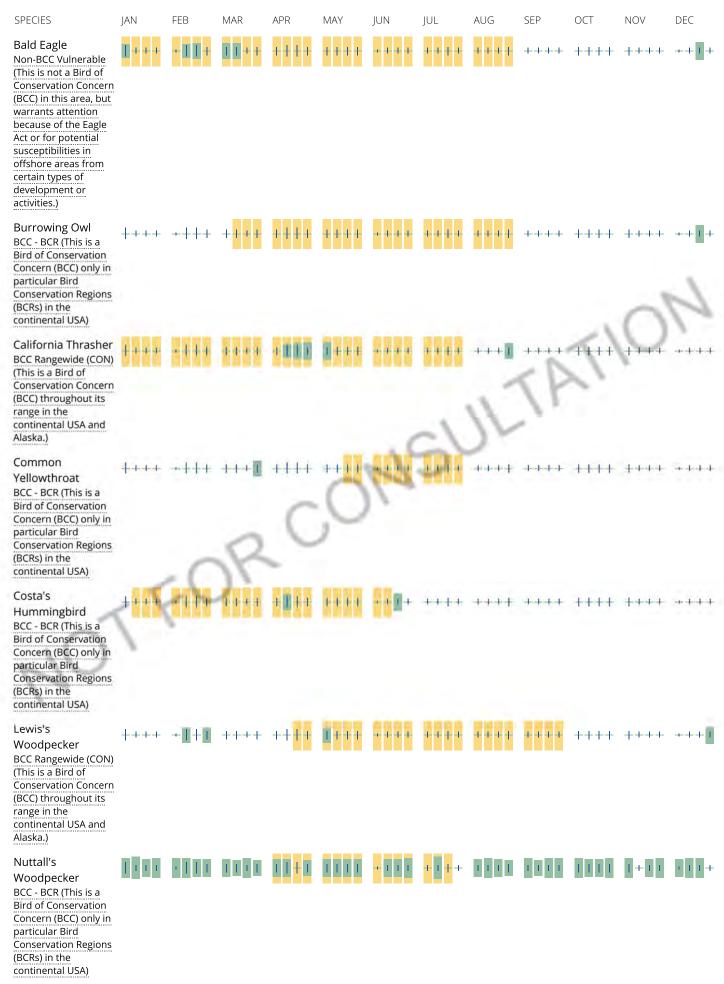
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

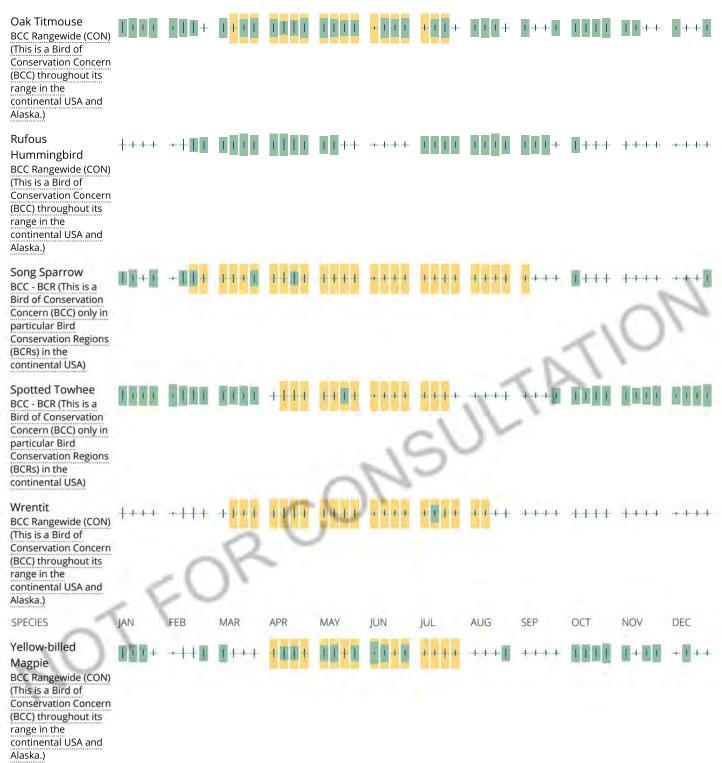
No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network</u> (<u>AKN</u>). The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>E-bird Explore Data Tool</u>.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <u>Northeast Ocean Data Portal</u>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review.

Alternately, you may download the bird model results files underlying the portal maps through the <u>NOAA NCCOS</u> <u>Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf</u> project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers</u> <u>District</u>.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



Inventory of Rare and Endangered Plants - 7th edition

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Status: search results - Wed, Jan. 9, 2019, 17:35 ET b

Search

Tip: Having trouble with a multi-word search? Try a single word, e.g. <code>ginger</code> or <code>cobra.[all</code> tips and help.] [search history]

Your Quad Selection: Richardson Springs (593D) 3912177, Chico (577A) 3912167, Ord Ferry (577B) 3912168, Cohasset (592B) 3912186, Paradise West (592C) 3912176, Hamlin Canyon (576B) 3912166, Campbell Mound (593A) 3912187, Richardson Springs NW (593B) 3912188, Nord (593C) 3912178

Hits 1 to 31 of 31

Requests that specify topo quads will return only Lists 1-3.

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
=		1	Astragalus tener var. ferrisiae	Ferris' milk-vetch	Fabaceae	List 1B.1
=		1	Balsamorhiza macrolepis 🗯	big-scale balsamroot	Asteraceae	List 1B.2
=		1	Campylopodiella stenocarpa	flagella-like atractylocarpus	Dicranaceae	List 2B.2
=		1	Cardamine pachystigma var. dissectifolia	dissected-leaved toothwort	Brassicaceae	List 1B.2
=		1	<u>Castilleja</u> <u>rubicundula</u> var. <u>rubicundula</u>	pink creamsacs	Orobanchaceae	List 1B.2
=		1	Clarkia gracilis ssp. albicaulis	white-stemmed clarkia	Onagraceae	List 1B.2
≧		1	Clarkia mildrediae ssp. mildrediae ⁽²⁰⁾	Mildred's clarkia	Onagraceae	List 1B.3
=		1	Cryptantha crinita	silky cryptantha	Boraginaceae	List 1B.2
=		1	Downingia pusilla 🗯	dwarf downingia	Campanulaceae	List 2B.2
=		1	<u>Eriogonum</u> <u>umbellatum</u> var. <u>ahartii</u>	Ahart's buckwheat	Polygonaceae	List 1B.2
=		1	Euphorbia hooveri	Hoover's spurge	Euphorbiaceae	List 1B.2
=		1	Fritillaria eastwoodiae	Butte County fritillary	Liliaceae	List 3.2
=		1	Fritillaria pluriflora	adobe-lily	Liliaceae	List 1B.2
=		1	Gratiola heterosepala 🗯	Boggs Lake hedge- hyssop	Plantaginaceae	List 1B.2
=		1	<u>Hibiscus lasiocarpos</u> var. <u>occidentalis</u>	woolly rose-mallow	Malvaceae	List 1B.2
=		1	Imperata brevifolia 🕮	California satintail	Poaceae	List 2B.1
=		1	Juncus <u>leiospermus</u> var. <u>leiospermus</u> 🚳	Red Bluff dwarf rush	Juncaceae	List 1B.1
2		. 1	<u>Lasthenia</u> g <u>labrata</u> ssp. <u>coulteri</u> இ	Coulter's goldfields	Asteraceae	List 1B.1

≅	1	<u>Limnanthes</u> <u>floccosa</u> ssp. <u>californica</u>	Butte County meadowfoam	Limnanthaceae	List 1B.1
=	1	Monardella venosa	veiny monardella	Lamiaceae	List 1B.1
2	1	Orcuttia pilosa	hairy Orcutt grass	Poaceae	List 1B.1
2	1	Orcuttia tenuis	slender Orcutt grass	Poaceae	List 1B.1
~	1	Paronychia ahartii 🛱	Ahart's paronychia	Caryophyllaceae	List 1B.1
=	1	Rhynchospora californica	California beaked- rush	Cyperaceae	List 1B.1
=	1	Rhynchospora capitellata 🇯	brownish beaked- rush	Cyperaceae	List 2B.2
=	1	Rupertia hallii 🕮	Hall's rupertia	Fabaceae	List 1B.2
=	1	Sagittaria sanfordii 🗯	Sanford's arrowhead	Alismataceae	List 1B.2
=	1	Sidalcea robusta 🗯	Butte County checkerbloom	Malvaceae	List 1B.2
△	1	Stuckenia filiformis ssp. alpina	slender-leaved pondweed	Potamogetonaceae	List 2B.2
△	1	Tuctoria greenei 🕮	Greene's tuctoria	Poaceae	List 1B.1
2	1	Wolffia brasiliensis	Brazilian watermeal	Araceae	List 2B.3

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No more hits.







California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria:

Quad IS (Richardson Springs (3912177) OR Richardson Springs NW (3912188) OR Chico (3912167) OR Chico (3912167) OR Ord Ferry (3912168) OR Paradise West (3912176) OR Hamlin Canyon (3912166) OR Nord (3912178) OR Campbell Mound (3912187))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
adobe-lily	PMLIL0V0F0	None	None	G2G3	S2S3	1B.2
Fritillaria pluriflora						
Ahart's buckwheat	PDPGN086UY	None	None	G5T3	S3	1B.2
Eriogonum umbellatum var. ahartii						
Ahart's paronychia	PDCAR0L0V0	None	None	G3	S3	1B.1
Paronychia ahartii						
American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Falco peregrinus anatum						
Antioch Dunes anthicid beetle	IICOL49020	None	None	G1	S1	
Anthicus antiochensis						
bald eagle	ABNKC10010	Delisted	Endangered	G5	S 3	FP
Haliaeetus leucocephalus						
bank swallow	ABPAU08010	None	Threatened	G5	S2	
Riparia riparia						
big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
Balsamorhiza macrolepis						
Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	G2	S2	1B.2
Gratiola heterosepala						
Brazilian watermeal	PMLEM03020	None	None	G5	S2	2B.3
Wolffia brasiliensis						
brownish beaked-rush	PMCYP0N080	None	None	G5	S1	2B.2
Rhynchospora capitellata						
burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Athene cunicularia						
Butte County checkerbloom	PDMAL110P0	None	None	G2	S2	1B.2
Sidalcea robusta						
Butte County fritillary	PMLIL0V060	None	None	G3Q	S3	3.2
Fritillaria eastwoodiae						
Butte County meadowfoam Limnanthes floccosa ssp. californica	PDLIM02042	Endangered	Endangered	G4T1	S1	1B.1
Butte County morning-glory	PDCON04012	None	None	G5T3	S3	4.2
Calystegia atriplicifolia ssp. buttensis				_		
California beaked-rush Rhynchospora californica	PMCYP0N060	None	None	G1	S1	1B.1
California black rail Laterallus jamaicensis coturniculus	ABNME03041	None	Threatened	G3G4T1	S1	FP



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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rank/CDFW SSC or FP
California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Linderiella occidentalis						
California satintail	PMPOA3D020	None	None	G4	S3	2B.1
Imperata brevifolia						
Central Valley Drainage Fall Run Chinook Stream Central Valley Drainage Fall Run Chinook Stream	CARA2442CA	None	None	GNR	SNR	
Central Valley Drainage Hardhead/Squawfish Stream Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	GNR	SNR	
chinook salmon - Central Valley spring-run ESU Oncorhynchus tshawytscha pop. 6	AFCHA0205A	Threatened	Threatened	G5	S1	
Coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Phrynosoma blainvillii Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Conservancy fairy shrimp Branchinecta conservatio	ICBRA03010	Endangered	None	G2	S2	
Coulter's goldfields Lasthenia glabrata ssp. coulteri	PDAST5L0A1	None	None	G4T2	S2	1B.1
dissected-leaved toothwort	PDBRA0K1B1	None	None	G3G5T2Q	S2	1B.2
Cardamine pachystigma var. dissectifolia						
dwarf downingia Downingia pusilla	PDCAM060C0	None	None	GU	S2	2B.2
Ferris' milk-vetch Astragalus tener var. ferrisiae	PDFAB0F8R3	None	None	G2T1	S1	1B.1
flagella-like atractylocarpus Campylopodiella stenocarpa	NBMUS84010	None	None	G5	S1?	2B.2
foothill yellow-legged frog Rana boylii	AAABH01050	None	Candidate Threatened	G3	S 3	SSC
giant gartersnake Thamnophis gigas	ARADB36150	Threatened	Threatened	G2	S2	
great blue heron Ardea herodias	ABNGA04010	None	None	G5	S4	
great egret Ardea alba	ABNGA04040	None	None	G5	S4	
Great Valley Cottonwood Riparian Forest Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	\$2.2	
Great Valley Valley Oak Riparian Forest Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	
Great Valley Willow Scrub Great Valley Willow Scrub	CTT63410CA	None	None	G3	\$3.2	



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Out of the	El. (C :	Fadamil Or r	01-1- 6: 1	Olahai B	04-4-5	Rare Plant Rank/CDFW
Species	Element Code	Federal Status	State Status	Global Rank G1	State Rank S1	1B.1
Greene's tuctoria Tuctoria greenei	PMPOA6N010	Endangered	Rare	GT	51	18.1
	PMPOA4G040	Endangered	Endongorod	G1	S1	1B.1
hairy Orcutt grass Orcuttia pilosa	PINIFOA4G040	Endangered	Endangered	Gi	31	ID.I
Hall's rupertia	PDFAB62010	None	None	G2G3	S2S3	1B.2
Rupertia hallii	FDFAD02010	None	None	G2G3	3233	10.2
hoary bat	AMACC05030	None	None	G5	S4	
Lasiurus cinereus	7 (10) 7 (2000000	None	TTOTIC	00	04	
Hoover's spurge	PDEUP0D150	Threatened	None	G1	S1	1B.2
Euphorbia hooveri	1 5201 05 100	rinoatorioa	140.10	0.	01	15.2
least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Vireo bellii pusillus	7.2. 2	aagooa		00.2	0_	
midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Branchinecta mesovallensis	102111100100			5 2	0200	
Mildred's clarkia	PDONA050Q2	None	None	G3T2T3	S2S3	1B.3
Clarkia mildrediae ssp. mildrediae						-
North American porcupine	AMAFJ01010	None	None	G5	S3	
Erethizon dorsatum						
Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Northern Hardpan Vernal Pool						
Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	G1	S1.1	
Northern Volcanic Mud Flow Vernal Pool						
osprey	ABNKC01010	None	None	G5	S4	WL
Pandion haliaetus						
pallid bat	AMACC10010	None	None	G5	S3	SSC
Antrozous pallidus						
pink creamsacs	PDSCR0D482	None	None	G5T2	S2	1B.2
Castilleja rubicundula var. rubicundula						
Red Bluff dwarf rush	PMJUN011L2	None	None	G2T2	S2	1B.1
Juncus leiospermus var. leiospermus						
Sacramento anthicid beetle	IICOL49010	None	None	G1	S1	
Anthicus sacramento						
Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Sagittaria sanfordii						
silky cryptantha	PDBOR0A0Q0	None	None	G2	S2	1B.2
Cryptantha crinita						
silver-haired bat	AMACC02010	None	None	G5	S3S4	
Lasionycteris noctivagans						
slender Orcutt grass	PMPOA4G050	Threatened	Endangered	G2	S2	1B.1
Orcuttia tenuis						
slender-leaved pondweed	PMPOT03091	None	None	G5T5	S2S3	2B.2
Stuckenia filiformis ssp. alpina						



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Consider	Flowert Code	Fordered Status	Ctata Ctatus	Olahal Danis	Ctata Baula	Rare Plant Rank/CDFW
Species steelhead - Central Valley DPS	AFCHA0209K	Federal Status Threatened	State Status None	Global Rank G5T2Q	State Rank S2	SSC or FP
Oncorhynchus mykiss irideus pop. 11	AFCHA0209N	Tilleaterieu	None	G312Q	32	
Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Buteo swainsoni	ADIVICE19070	None	Tilleateried	03	00	
tricolored blackbird	ABPBXB0020	None	Candidate	G2G3	S1S2	SSC
Agelaius tricolor	ABI BABOOZO	140110	Endangered	0200	0102	000
valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
Desmocerus californicus dimorphus						
veiny monardella	PDLAM18082	None	None	G1	S1	1B.1
Monardella venosa						
vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta lynchi						
vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
Lepidurus packardi						
western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
Eumops perotis californicus						
western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Emys marmorata						
western red bat	AMACC05060	None	None	G5	S3	SSC
Lasiurus blossevillii						
western spadefoot	AAABF02020	None	None	G3	S3	SSC
Spea hammondii						
western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coccyzus americanus occidentalis						
white-stemmed clarkia	PDONA050J1	None	None	G5T3	S 3	1B.2
Clarkia gracilis ssp. albicaulis						
woolly meadowfoam	PDLIM02043	None	None	G4T4	S3	4.2
Limnanthes floccosa ssp. floccosa						
woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
Hibiscus lasiocarpos var. occidentalis						
Yuma myotis	AMACC01020	None	None	G5	S4	
Myotis yumanensis						

Record Count: 76

Appendix B

Observed Species List

Plant Species Observed within the Coh	asset TPM Project January 21, 2019
Scientific Name	Common Name
Acmispon sp.	Spanish lotus
Arctostaphylos manzanita ssp. manzanita	Big manzanita
Avena barbata	Wild oats
Brachypodium distachyon	False brome
Bromus diandrus	Rip-gut brome
Bromus hordeaceus	Soft chess
Cardamine oligosperma	Western bittercress
Ceanothus cuneatus var. cuneatus	Buck brush
Centaurea solstitialis	Yellow star thistle
Centromadia fitchii	Fitch's spikeweed
Chlorogalum pomeridianum var. pomeridianum	Wavyleaf soap-plant
Claytonia perfoliata	Miner's lettuce
Croton setiger	Turkey-mullein
Cynosurus echinatus	Hedgehog dogtail
Dichelostemma sp.	Ookow
Elymus caput-medusae	Medusahead
Elymus multisetus	Big squirreltail grass
Erodium botrys	Long-beaked stork's-bill
Erodium brachycarpum	Foothill filaree
Erodium cicutarum	Cut-leaf filaree
Festuca perennis	Rye-grass
Galium aparine	Bedstraw
Galium parisiense	Wall bedstraw
Gastridium phleoides	Nitgrass
Geranium dissectum	Cut-leaved geranium
Geranium molle	Dove's-foot geranium
Hordeum marinum ssp. gussoneanum	Mediterranean barley
Hordeum murinum	Wall hare barley
Hypericum perforatum	Klamathweed
Hypochaeris glabra	Smooth cat's ear
Keckiella lemmonii	Bush beardtongue
Leontodon saxatilis	Hawkbit
Logfia gallica	Narrowleaf cottonrose
Lonicera interrupta	Chaparral honeysuckle
Lupinus sp.	Sky lupine
Micropus californicus var. californicus	Q tips
Minuartia sp.	Sandwort
Navarretia sp.	Pincushion plant
Pentagramma triangularis ssp. triangularis	Gold-backed fern
Pinus sabiniana	Gray pine
Plagiobothrys sp.	Common popcorn flower
Plagiobothrys stipitatus	Small-flowered popcornflower
Primula clevelandii ssp patula	Lowland shootingstar

Scientific Name	Common Name		
Quercus douglasii	Blue oak		
Quercus wislizeni	Live oak		
Ranunculus sp.	Field buttercup		
Rumex crispus	Curly dock		
Selaginella hansenii	Hansen's spikemoss		
Silene gallica	Common catchfly		
Silybum marianum	Milk thistle		
Torilis arvensis	Hedge parsley		
Toxicodendron diversilobum	Poison oak		
Trifolium sp.	Clover		
Trifolium hirtum	Rose clover		
Triteleia sp.	Triteleia		
Verbascum blattaria	Moth mullein		
Vicia sp.	Winter vetch		
Zeltnera venusta	June centaury		

Wildlife Species Observed within the Cohasset TPM BRA January 21, 2019					
Scientific Name	Common Name				
Birds					
Aphelocoma californica	Scrub jay				
Baeolophus inornatus	Oak titmouse				
Callipepla californica	California quail				
Calypte anna	Anna's Hummingbird				
Cathartes aura	Turkey vulture				
Colaptes auratus	Northern flicker				
Corvus brachyrhynchos	American crow				
Corvus corax	Common Raven				
Haemorhous mexicanus	House finch				
Melospiza melodia	Song Sparrow				
Mimus polyglottos	Northern mockingbird				
Passer domesticus	House sparrow				
Picoides nuttallii	Nuttall's woodpecker				
Sayornis nigricans	Black phoebe				
Tyrannus verticalis	Western kingbird				
Mammals					
Canis latrans	Coyote (found scat)				
Sciurus griseus	Western gray squirrel				
Reptiles and Amphibians					
Sceloporus occidentalis	Western fence lizard				

Appendix C

Project Site Photographs

Project Site Photographs Taken January 21, 2019



Typical blue oak woodland habitat present on the site with rocky, herbaceous understory



Example of a shallow vernally wet feature present within the BSA



One of the ephemeral drainages present



Patch of dense shrub (buckbrush) understory



Example of potential bat day roost habitat