

Appendix C Natural Environmental Study Minimal Impact

NATURAL ENVIRONMENT STUDY (MINIMAL IMPACTS)

Napa County, California



STATE ROUTE-29

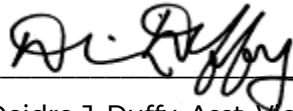
Intersection Improvements at
Oakville Cross Road (04-NAP-29-22.72) and
Rutherford Road (04-NAP-29-24.59)

EA 2W430/PN 0421000200

March 2023



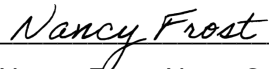
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Acronyms Used

BSA	Biological Study Area
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
DOT	Department of Transportation
EO	Executive Order
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
MLRA	Major Land Resource Area
MTC	Metropolitan Transportation Commission
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NES(MI)	Natural Environment Study (Minimal Impacts)
NOAA	National Oceanic and Atmospheric Administration
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NVTA	Napa Valley Transportation Authority
NWI	National Wetlands Inventory
RWQCB	Regional Water Quality Control Board
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WSP	WSP USA, Inc.

1. INTRODUCTION

The Metropolitan Transportation Commission (MTC), in cooperation with Napa Valley Transportation Authority (NVTA) and the California Department of Transportation (Caltrans), proposes to improve the operation and safety of State Route (SR)-29 at the intersections of Oakville Cross Road (04-NAP-29-22.72) and Rutherford Road (04-NAP-29-24.59; Project; EA 2W430). The proposed Project will provide operational and safety improvements along the SR-29 corridor in the form of traffic signals at the intersection of Rutherford Road and in the form of roundabouts at the intersection of Oakville Cross Road. The improvements will relieve traffic congestion that plagues the corridor during peak commute periods and during the weekends. The intersection improvements will improve safety and corridor operation and provide multimodal access.

1.1. Project History

SR-29 (St. Helena Highway) is a key route providing north/south connectivity in the communities of Rutherford, Oakville, and Yountville in Napa County, California (Figure 1). This section of corridor regularly experiences heavy traffic congestion during the peak periods. In order to identify the causes of and potential solutions to congestion in the greater project vicinity, the MTC partnered with the NVTA in January 2020 to perform a traffic operations analysis. The results indicated that constructing traffic signals at the intersection of SR-29 and Rutherford Road and a roundabout at the intersection of SR-29 and Oakville Cross Road would improve multimodal performance along SR-29. A preliminary traffic operations analysis was presented to project stakeholders. Based on the feedback received, the compact roundabout options would be strong candidates to advance into the project development and environmental review process. The preferred alternative that proceeds to 65% design, final design, and beyond will be determined through a series of ongoing stakeholder engagements.

1.1.1. Project Purpose and Need

The primary objective of the project is to enhance safety and traffic operations at the intersections of SR-29 / Oakville Cross Road and SR-29 / Rutherford Road. This will improve travel time and reduce delay for side streets accessing SR-29. At these intersections, traffic safety will be enhanced, along with improved turning movements.

The intersections under study have been experiencing poor traffic operation and a high number of collisions due to the lack of protected turning movements. High traffic volume causes poor intersection operation occurring during peak and non-peak periods. The number of collisions exceeds statewide averages for similar types of facilities. Due to insufficient gaps in traffic streaming, there is a lack of protected turning movements to allow for access to and from SR-29.

Federal Highway Administration (FHWA) studies indicate that a properly designed roundabout would slow down traffic and, hence, reduce the probabilities of most severe types of intersection crashes and injuries. Roundabouts also allow for continuous flow of traffic at lower speed through this segment of the corridor and would be the ideal candidate to address the safety and operational challenges associated with the corridor. Preliminary crash data analyses provided by Caltrans indicate the total rate of fatal and injury crashes at these two intersections are above the average crash rate for similar facilities statewide. Based on the results of traffic and safety analyses and feedback received from project stakeholders, the implementation of a traffic signal and roundabout are viable options to address the operations and safety needs.

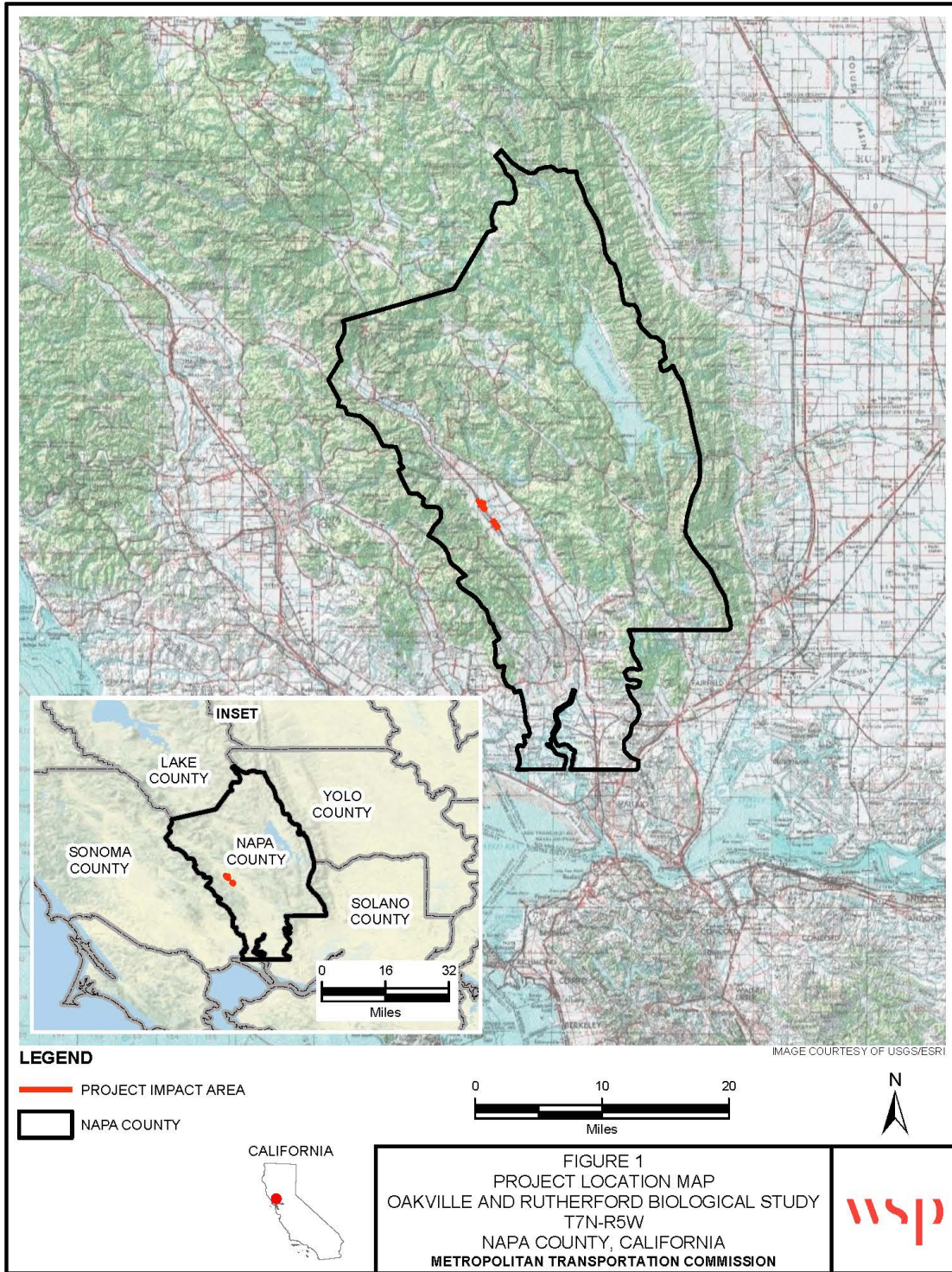


Figure 1. Project Location

1.2. Project Description

Improvements are proposed at the intersections of SR-29 / Oakville Cross Road and SR-29 / Rutherford Road. Due to the proximity to the Napa Wine Train tracks, railroad crossing improvements will also be needed at both intersections.

Oakville Cross Road Intersection

A single-lane roundabout is proposed at the intersection of SR-29 and Oakville Cross Road. Limits of construction on SR-29 extend approximately 0.5 mile northerly and southerly from the center of the Oakville Cross Road intersection, approximately 500 feet in easterly direction along Oakville Cross Road, and approximately 200 feet in the westerly direction at the existing driveway crossing railroad tracks (approximately 19 acres). Roundabouts offer improved safety over other at-grade intersection control forms and offer the following advantages:

- Fewer conflict points
- Unlike a traffic signal, it allows the traffic to continuously flow through the intersection
- Provides for U-turn movement for large trucks
- Vehicles move through the intersection at a much lower speed as compared to vehicles moving through a signalized intersection
- Significantly reduces the severity of crashes
- Improves safety for pedestrian movement and bicyclist traffic due to slow speed of vehicles
- Improves capacity compared with similarly sized signalized intersection

The Oakville roundabout would maintain existing traffic patterns, however, ingress to the Oakville Grocery would be modified to right-in and right-out only. The project would not preclude southbound access to the Oakville Grocery driveway (currently a left turn-in); rather, traffic would be routed through the roundabout to access the grocery.

Construction of the roundabout would also include the installation of new landscaping, intersection lighting, a pedestrian and bicyclist shared use path with bike ramps, and splitter islands with curb ramps. In addition, the existing drainage would be modified to accommodate the proposed roundabout and the existing signage within the right-of-way would be replaced or upgraded.

The existing channelization at the intersection of SR-29 and Oakville Grade Road may be modified as part of the mainline improvement required for the construction of a roundabout at the intersection of SR-29 and Oakville Cross Road.

Rutherford Road Intersection

Due to right-of-way limitations, a roundabout will not be feasible at the Rutherford Road intersection without substantial right-of-way impact. Hence, a traffic signal and/or other traffic calming measures are proposed at the intersection of SR-29 and Rutherford Road.

At the Rutherford Road intersection, the project proposes improvements such as a traffic signal, active transportation (improvements include bicyclist and pedestrian facilities that make it safer for pedestrian and bicyclist movements at the intersection), median treatments, and traffic calming measures along the mainline at the intersection.

Limits of improvements on SR-29 would extend approximately 0.5 mile northerly and southerly from the center of the Rutherford Road intersection, and approximately 500 feet easterly along Rutherford Road (approximately 12.4 acres).

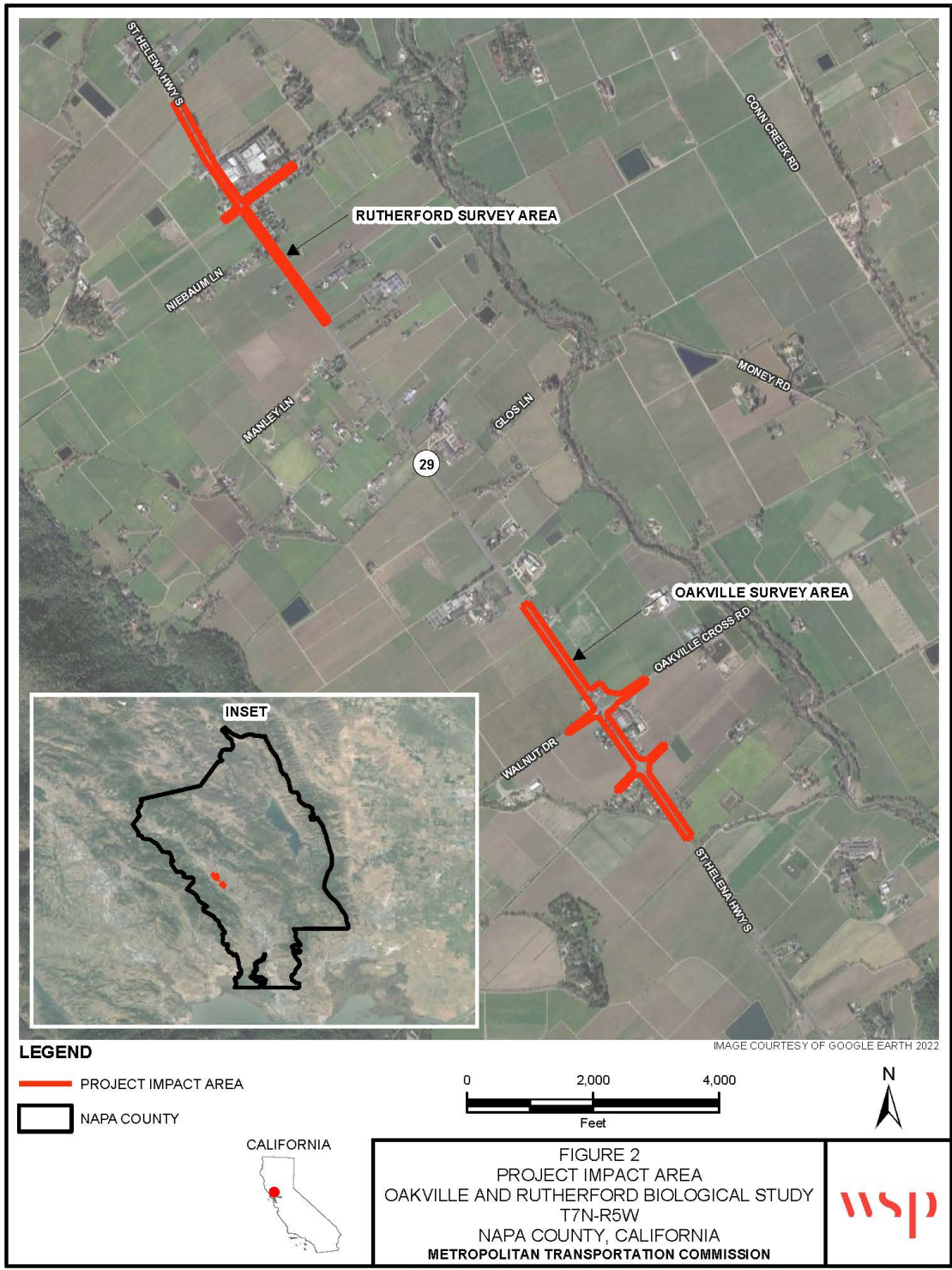


Figure 2. Project Impact Area

2. STUDY METHODS

This Natural Environment Study (Minimal Impacts; NES[MI]) was conducted by WSP USA Inc. (WSP) on behalf of the MTC. This section describes the methods used in the preparation of this NES(MI) report and includes a list of resources reviewed, field survey dates and personnel, and limitations encountered during the study that may influence the conclusions reached in this report.

2.1. Regulatory Requirements

The purpose of the NES(MI) is to document biological studies and perform analyses and evaluations necessary to satisfy the legal requirements of state and federal statutes. These statutes include federal and state regulations detailed below.

2.1.1. Federal Regulations

The following federal regulations are applicable to the Project as it relates to the natural environment.

National Environmental Policy Act (NEPA)

NEPA [42 United States Code [USC] 4321 et seq.] was signed into law on January 1, 1970. The Act establishes national environmental policy and goals for the protection, maintenance, and enhancement of the environment and provides a process for implementing these goals within the federal agencies. NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions.

Federal Endangered Species Act (FESA)

Under the FESA, the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 USC Section 1533[c]). Pursuant to the requirements of the FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federal-listed threatened or endangered species may be present in the Project Impact Area and determine whether the project would result in the “take” of any such species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC Section 1536[3], [4]). Section 7 of the FESA provides a means for authorizing incidental Take of federal endangered or threatened species that result from federally conducted, permitted, or funded projects. Similarly, Section 10 authorizes incidental Take of federally endangered or threatened species that result from non-federal projects.

Federal Migratory Bird Treaty Act (MBTA)

The MBTA (16 USC, Sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, bird nests, and eggs. The MBTA is administered by the USFWS and special permits from the agency are generally required for the Take of any migratory birds. This act applies to all persons and agencies in the US, including federal agencies.

Executive Order (EO) 13112 - Invasive Species

Executive Order 13112 directs all federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. Executive Order 13112 established a national Invasive Species Council made up of federal agencies and departments and a supporting Invasive Species Advisory Committee composed of state, local, and private entities. The Invasive Species Council and Advisory Committee oversee and facilitate implementation of the Executive Order, including preparation of a National Invasive Species Management Plan. The Management Plan recommends objectives and measures to implement the Executive Order and to prevent the introduction and spread of invasive species. The Executive Order and directives from the Federal Highway Administration (FHWA) require consideration of invasive species in NEPA analyses, including the identification and distribution of species, their potential impacts, and measures to prevent or eradicate them.

Clean Water Act (CWA) Section 402 - National Pollutant Discharge Elimination System (NPDES)

Section 402(p) of the Clean Water Act establishes a permit under the NPDES program for discharges of storm water resulting from ground disturbing construction activities, such as grading. For ground disturbing activities impacting less than one acre, compliance with the County's grading ordinance satisfies the requirements of NPDES. For ground disturbing construction activities in excess of one acre, a NPDES Phase II permit from the Regional Water Quality Control Board (RWQCB) is required. The preparation of a Stormwater Pollution Prevention Plan (SWPPP) is a requirement of the NPDES Phase II permit.

CWA - Sections 401 and 404

Under Section 401 of the Clean Water Act (33 U.S.C. 1341), any applicant for a Federal permit or license for any activity that may result in a discharge into waters of the United States shall provide the licensing or permitting agency a water quality certification from the state, or, if appropriate, from the agency having jurisdiction over the waters at the point where the discharge originates, to ensure that the proposed activity complies with the appropriate water quality standards.

The U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency regulate the discharge of dredge and fill material into waters of the United States under Section 404 of the Clean Water Act (33 U.S.C. 1344). The USACE issues permits for certain dredge and fill activities in waters of the United States pursuant to the regulations in 33 C.F.R. § 320-330 (2023).

2.1.2. State Regulations

California Lake and Streambed Alteration Agreement (CFGCA § 1600)

California Fish and Game Code § 1600 requires any person, government agency, or public utility proposing any activity that will divert or obstruct the natural flow or change the bed, channel, or bank of any river, stream, or lake, or proposing to use any material from a streambed, to first notify the California Department of Fish and Wildlife (CDFW) of such proposed activity.

California Environmental Quality Act (CEQA)

The CEQA is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA applies to all discretionary projects proposed to be conducted or approved by a California public agency, including private projects requiring discretionary government approval.

California Endangered Species Act (CESA)

Under the CESA, the CDFW has the responsibility for maintaining a list of threatened and endangered species designated under state law (California Fish and Game Code [CFGF] Section 2070). Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed threatened, endangered, or candidate for state-listing species may be present in the Project Impact Area and determine whether the proposed project would result in take of any such species. Under CESA, “Take” is defined as the action of or attempt to “pursue, hunt, shoot, capture, collect, or kill.” The CDFW may authorize the incidental Take of a state-listed species under Section 2081 of the CFGF. For species that are listed as threatened or endangered under both the FESA and CESA, and for which an incidental take permit has been issued in accordance with Section 7 or Section 10 of the FESA, CDFW may authorize take after certifying that the federal Incidental Take Permit is consistent with CESA, pursuant to Section 2080.1 of the CFGF.

California Fish and Game Code (CFGF)

The CFGF provides protection for migratory birds and raptors. Raptors and raptor nests or eggs are protected from Take under CFGF Section 3503.5. Migratory birds are expressly prohibited from Take under CFGF Section 3513 and species designated by CDFW as fully protected species are protected from take under CFGF Sections 3511 4700, 5050, and 5515.

Native Plant Protection Act (NPPA)

The NPPA (CFGF 1900-1913) prohibits the Taking, possessing, or sale within the state, of any plants with a state designation of rare, threatened, or endangered. An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to Take listed plant species, provided that the owners first notify CDFW and give that state agency at least 10 days to come and retrieve the plants before they are disturbed or destroyed. Fish and Game Code 1913 exempts from Take prohibition “the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way.”

Nesting Birds and Birds-of-Prey

CFGF 3503 protects all native nesting birds. CFGF 3503.5 protects all birds in the orders Falconiformes and Strigiformes (collectively known as birds-of-prey). Birds-of-prey include raptors, falcons, and owls. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any native bird or bird-of-prey, except as otherwise provided by the CFGF or any regulation adopted pursuant thereto.

Fully Protected Species

CDFW’s classification of “fully protected” species was the State’s initial effort in the 1960s to identify and protect animals that were rare or faced possible extinction. Lists of fully protected species were created for birds (CFGF 3511) mammals (CFGF 4700) reptiles and amphibians (CFGF 5050), and fish (CFGF 5515). The CFGF states that fully protected species, “... may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species.”

Take Prohibition

CFGF 86 defines ‘Take’ and 2080 prohibits ‘Taking’ of a species listed as threatened or endangered under the CESA (CFGF 2080) or otherwise fully protected, as defined in CFGF 3511, 4700, and 5050.

2.2. Studies Required

Two Biological Study Areas (BSAs) were identified for each intersection (Figures 3a and 3b). The BSAs included the Project Impact Area, buffered by 500 feet. The distance between the two SR-29 intersections under study is approximately 1.8 miles.

1. **Oakville BSA.** The SR-29 & Oakville Cross Road intersection is located approximately 40 miles north of San Francisco as the crow flies and straddles SR-29 in the heart of Napa Valley between the towns of Rutherford and Yountville. The Napa Valley Wine Trail railroad right-of-way runs parallel to SR-29 north to south on the western side of the BSA alongside the Oakville Pump Service station. The historic Oakville Grocery is located on the northeastern corner of the BSA adjacent to a vineyard. There are several wineries on the eastern side of SR-29. The BSA included 184 acres within the SR-29 and Oakville Cross Rd intersection and adjacent railroad right-of way.
2. **Rutherford BSA.** The SR-29 & Rutherford Road intersection is located approximately 45 miles north of San Francisco as the crow flies and straddles SR-29 between the towns of Zinfandel and Oakville. The immediate vicinity around the intersection is a mostly built environment, with Federal Express and United States Postal Service facilities on the northeastern corner of the intersection. Wineries and restaurants abut both SR-29 and Rutherford Road on the southeastern side of the BSA. The Rutherford Fire Department sits on the western side of the Napa Valley Wine Train railroad right-of-way which runs parallel to SR-29. A vineyard lies on the southwestern portion of the intersection on the western side of the railroad right-of-way. The Rutherford BSA includes 155 acres surrounding the SR-29 and Rutherford Road intersection and adjacent railroad right-of-way.

2.2.1. Literature Search

A desktop database review was conducted to identify historical records of special status plant and wildlife species in the Oakville and Rutherford BSAs and evaluate whether the species have the potential to occur today in the BSAs. Several data sources were reviewed, including:

- CDFW California Natural Diversity Database (CNDDDB; October 2022) reviewed to identify any species or biological resources requiring consideration within a 500-foot buffer of the Biological Study Areas (BSAs; Appendix 1)
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants Database (Appendix 2)
- US Department of Agriculture; Natural Resources Conservation Service (NRCS) Web Soil Survey (Appendix 3)
- USFWS Information for Planning and Consultation (IPaC) planning tool (Appendix 4)
- USFWS National Wetland Inventory (NWI; Appendix 1)

The National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service Species List was not applicable since the Project is located outside of NOAA Fisheries jurisdiction.

2.2.2. Field Reviews

On September 9, 2021, a qualified Senior Biologist from WSP conducted a site reconnaissance survey focused on biological resources within the Oakville and Rutherford BSAs (Appendix 1). The intent of the

survey was to support permitting, pre-construction monitoring, compliance with mitigation measures, and other agency-required analyses.

2.2.3. Survey Methods

The site reconnaissance survey entailed traversing the Project Impact Area on foot to generally characterize the current site conditions and investigate for sensitive plants, birds, and other biological resources. The biologist scanned nearby adjacent land using binoculars to identify any biological resources. The resources investigated during the September 2021 field survey included: land cover/land use; suitable habitat for migratory birds; raptor nests; and habitat for other special status species (WSP 2021; Appendix 1).

2.3. Personnel and Survey Dates

The site reconnaissance for biological resources was conducted on September 9, 2021, by a biologist familiar with the region where the Project is located. This survey was conducted to document baseline conditions and assess the potential for special-status plant and wildlife species to occur within the BSAs that could pose a constraint to development.

2.4. Agency Coordination and Professional Contacts

The Caltrans biologist was consulted on June 29, 2022, regarding potential impacts to special status species that may result from Project activities. Caltrans reviewed the 2021 *Site Reconnaissance for Biological Resources Memorandum* (WSP 2021 Appendix 1). Caltrans requested further research into potential impacts to California red-legged frog (*Rana draytonii*) and Swainson's hawk (*Buteo swainsoni*) to determine if the Project would qualify for a Natural Environment Study (Minimal Impacts; NES[MI]) or if a full NES would be required. It was later decided via email that a NES(MI) would be appropriate for the Project (G. Pera, pers. comm.).

2.5. Limitations That May Influence Results

The field survey was conducted in September during a time period outside of the nesting and blooming season of birds and plants. It is to be used as a general reference and is limited by the season, time of day, and weather condition in which the field survey was conducted.

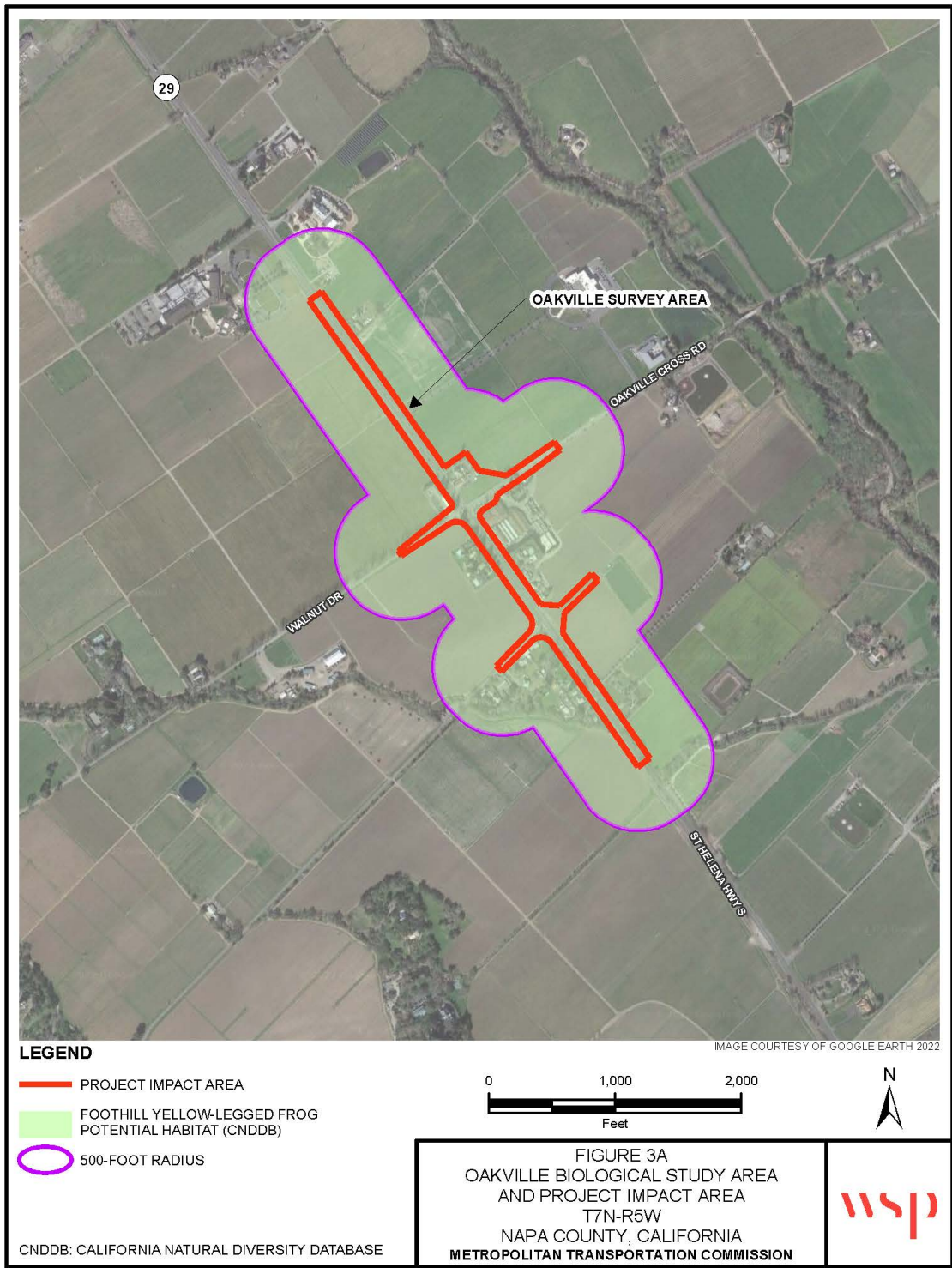
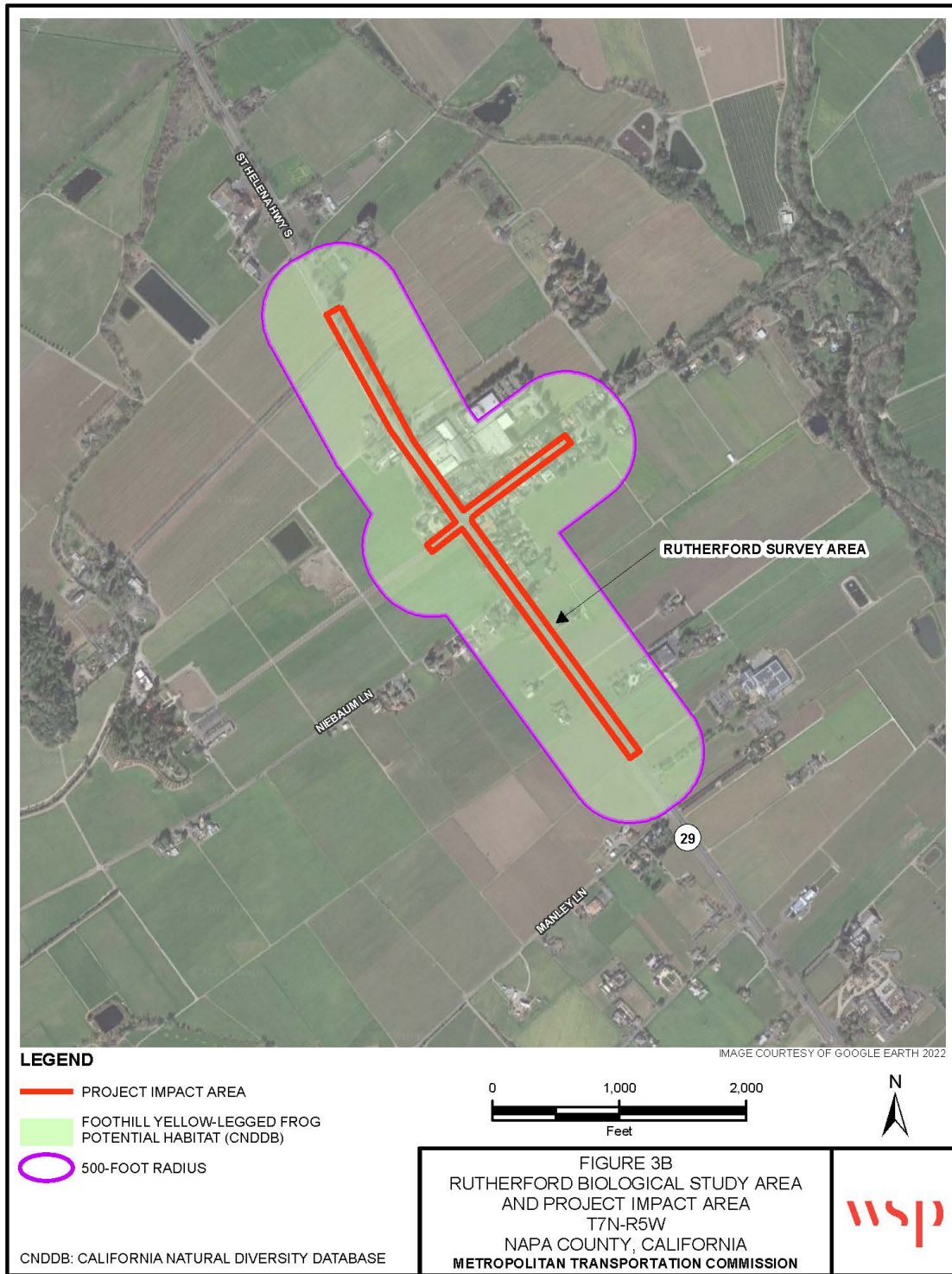


Figure 3a. Oakville Biological Study Area



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Figure 3b. Rutherford Biological Study Area

3. RESULTS: ENVIRONMENTAL SETTING

The BSA is located within the Natural Resources Conservation Service (NRCS) Land Resource Region (LRR) Central California Coastal Valleys, Major Land Resource Area (MLRA) 14. This MLRA makes up about 3,170 square miles (8,215 square kilometers) in central California (NRCS 2006). The Project area is situated in the northern portion of the MLRA in Napa Valley in southern Napa County surrounded by agricultural areas to the north, Vaca and Mayacamas Mountains to the east and west, respectively, and San Pablo Bay to the south.

3.1. Description of the Existing Physical and Biological Conditions

3.1.1. Study Area

Temperatures during the survey ranged from 62-70 degrees Fahrenheit, with little cloud coverage and winds of less than five miles per hour. There were no recent rain events leading up to the survey.

Representative site photos and BSA's for the SR-29 and Oakville Cross Rd and SR-29 and Rutherford Rd intersections can be found in Appendix 1.

3.1.2. Physical Conditions

Climate

The average annual precipitation in this MLRA is 11 to 66 inches (280 to 1,675 millimeters). Most of the rainfall occurs as low- or moderate-intensity, Pacific frontal storms during winter. This area is very dry from mid-spring to mid-autumn. Snowfall is rare. The average annual temperature is 56 to 61 degrees Fahrenheit (13 to 16 degrees Celsius). The freeze-free period averages 315 days and ranges from 265 to 365 days; it is longest near the coast, and it becomes shorter with increasing elevation.

Surface Water

The nearby Napa River flows from north to south through the City of Napa to San Pablo Bay.

There are no streams, wetlands, or other bodies of water within the Oakville BSA or Rutherford BSA and the proposed Project does not require the discharge or release of any fill materials into wetlands, watercourses, or other bodies of water.

Soil

According to the NRCS Soil Survey (Appendix 3), the subject property is underlain by the following soil units in order of dominance: 60.7% Bale clay loam (0 to 2 percent slopes), 34.9% Bale loam (0-2 percent slopes), 3.1% Pleasanton loam (0-2 percent slopes), and 1.3% Bale clay loam (2 to 5 percent slopes; NRCS 2006).

The major soil resource concerns are erosion, maintenance of the content of organic matter in the soils, and water quality. The erosion hazard is slight on the soils in valleys and on terrace sand benches of the valleys, except where improper irrigation practices are more damaging than rainfall. If the surface is unprotected in winter, the hazard of sheet and gully erosion is severe on the sloping soils on coastal terraces and benches and on upland soils (NRCS 2006).

3.1.3. Biological Conditions

Land Use

The majority of land in Napa Valley is utilized as farms and ranches. The acreage used for urban development is rapidly increasing. The gently sloping soils in the valleys are intensively used for many kinds of crops. Truck crops, wine grapes, strawberries and other fruits, cut flowers, small grains, hay, and pasture are the principal crops grown on irrigated land. Small grains are the principal crops in dry-farmed areas. Dairy farming is an important enterprise near the large cities (NRCS 2006).

Vegetation

In general, the Napa Valley area vegetation is dominated by grasses, brush, and trees. Naturalized annual grasses and forbs are dominant in many areas. Soft chess (*Bromus hordeaceus*), wild oats (*Avena fatua*), bromes (*Bromus* spp.), fescues (*Festuca* spp.), redstem filaree (*Erodium cicutarium*), burclover (*Medicago polymorpha*), and some remnant perennials are the major species in the lowlands of this MLRA. Scattered valley oak (*Quercus lobata*) grows on the well-drained soils (NRCS 2006).

Plant species encountered during the site reconnaissance include: bush poppy (*Dendromecon rigida*); California tree poppy (*Romneya coulteri*); blue gum (*Eucalyptus globulus*); coast redwood (*Sequoia sempervirens*); oleander shrub (*Nerium oleander*); coast live oak (*Quercus agrifolia*); California fan palm (*Washingtonia filifera*); and lavender (*Lavandula* spp.).

- **Oakville BSA:** There is minimal natural vegetation within the Oakville BSA. Along the western side of the railroad right-of-way is a stand of mixed tree species, including old growth coast redwoods, mixed oak species (*Quercus* spp.), and eucalyptus species (*Eucalyptus* spp.). The northeastern portion of the BSA is a vineyard with no ground vegetation. Ornamental and native plants were planted in established planters alongside the winery sidewalks on the eastern side of SR-29. Plants include large palms (*Arecaceae* spp.), bush poppies, lavender, and oleander shrubs. Ground vegetation in vineyards adjacent to SR-29 in the road and railroad rights-of-way had been cleared, most likely to limit vegetation fuel for fires.
- **Rutherford BSA:** There is minimal natural vegetation within the Rutherford BSA. Along the western side of the railroad right-of-way is a stand of mixed tree species, including old growth coast redwoods, eucalyptus, and mixed oak. A stand of oak and palm trees line the northeastern portion of the BSA along SR-29 and Rutherford Road. Ornamental bush poppies and oleander shrubs line SR-29 and Rutherford Road along the southeastern side of the BSA. Ground vegetation in vineyards adjacent to SR-29 in the road and railroad rights-of-way had been cleared, most likely to limit vegetation fuel for fires.

Wildlife

Some of the major wildlife species in this area are turkey (*Meleagris* spp.), California quail (*Callipepla californica*), mourning dove (*Zenaid macroura*), meadowlark (*Sturnella neglecta*), blackbird (*Turdus merula*), white-crowned sparrow (*Zonotrichia leucophrys*), white-tailed kite (*Elanus leucurus*), robin (*Turdus migratorius*), mockingbird (*Mimus polyglottos*), thrush (*Turdidae* spp.), California towhee (*Melospiza crissalis*), and cedar waxwing (*Bombycilla cedrorum*; NRCS 2006).

Wildlife species encountered during the site reconnaissance include: Steller's jay (*Cyanocitta stelleri*); acorn woodpecker (*Melanerpes formicivorus*); and red shouldered hawk (*Buteo lineatus*).

3.1.4. Habitat Connectivity

According to the California Essential Habitat Connectivity Project data, the Project Impact Area is not located in an Essential Connectivity Area of California. These areas were determined based on existing reserves, suitable or occupied habitat for particular species, or large areas of relatively natural landcover (Spencer et al. 2010). The nearest Essential Connectivity Area is approximately 3 miles east of the Project Impact Area in the Mayacamas Mountains.

3.2. Regional Species, Habitats, and Natural Communities of Concern

Species on this list have been considered in an effects analysis for this Project and include species that might exist in another geographic area.

There are no Proposed Candidates for state- or federal-listing, USFWS-designated Critical Habitats, nor Natural Communities of Concern in the Project Area.

CNDDDB search results identified one species of concern with potential to occur in the Project Area, the foothill yellow-legged frog (*Rana boylei*).

Table 1. FESA- and CESA-listed species potentially occurring or known to occur in the Project Impact Area.

Common Name	Scientific Name	Status ¹	General Habitat Description	Habitat Present/Absent ²	Rationale
Flowering Plants					
Burke's Goldfields	<i>Lasthenia burkei</i>	FE; SE	Meadows and seeps, Vernal pools	A	No suitable habitat in BSA
Calistoga Allorcarya	<i>Plagiobothrys strictus</i>	FE; SE	Meadows and seeps, Valley and foothill grassland, Vernal pools	A	No suitable habitat in BSA
Clara Hunt's Milk-Vetch	<i>Astragalus clarianus</i>	FE; SE	Chaparral, Cismontane woodland, Valley, and foothill grassland	A	No suitable habitat in BSA
Contra Costa Goldfields	<i>Lasthenia conjugens</i>	FE; SE	Vernal pools	A	No vernal pools in BSA
Few-Flowered Navarretia	<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	FE; SE	Vernal pools	A	No vernal pools in BSA
Napa Blue Grass	<i>Poa napensis</i>	FE; SE	Meadows and seeps, Valley, and foothill grassland	A	No suitable habitat in BSA
Sebastopol Meadowfoam	<i>Limnanthes vinculans</i>	FE; SE	Meadows and seeps, Valley and foothill grassland, Vernal pools	A	No suitable habitat in BSA
Tiburon Paintbrush	<i>Castilleja affinis</i> var. <i>neglecta</i>	FE; SE	Valley and foothill grassland	A	No suitable habitat in BSA
Birds					
Northern Spotted Owl	<i>Strix occidentalis caurina</i>	FT; ST	Dense forests	A	No dense forests in BSA
Swainson's Hawk	<i>Buteo Swainsoni</i>	ST	Plains, dry grassland, farmland, ranch country.	HP	Suitable nesting trees within both BSAs.
Reptiles					
Green Sea Turtle	<i>Chelonia mydas</i>	FE; SE	Shallow, coastal waters with lush seagrass beds, inshore bays, lagoons, and shoals	A	No suitable habitat in BSA

Common Name	Scientific Name	Status ¹	General Habitat Description	Habitat Present/ Absent ²	Rationale
Amphibians					
California Red-Legged Frog	<i>Rana draytonii</i>	FT; ST	Creeks and ponds with dense riparian woodlands	HP	No suitable habitat in the Project Impact Area
Foothill Yellow-Legged Frog	<i>Rana boylei</i>	FSC	Coastal mountain ranges; flowing streams and rivers with rocky substrate or sunny banks	HP	*See discussion below
Fishes					
Delta Smelt	<i>Hypomesus transpacificus</i>	ST	Upstream through the delta from estuarine to fresh waters; tolerant of a wide salinity range	A	No suitable habitat in BSA
Insects					
Monarch Butterfly	<i>Danaus plexippus</i>	FC	Milkweed with access to a slow-moving water source	A	Lack of milkweed habitat and nectar sources
Crustaceans					
California Freshwater Shrimp	<i>Syncaris pacifica</i>	FE; SE	Year-round flowing freshwater streams	A	No suitable habitat in BSA
Conservancy Fairy Shrimp	<i>Branchinecta conservatio</i>	FE; SE	California's Central Valley; relatively large, turbid freshwater vernal pools (playa pools)	A	No suitable habitat in BSA

¹Status: Federal Endangered (FE); Federal Threatened (FT); Federal Candidate (FC); State Endangered (SE); State Threatened (ST)

²Absent [A] - no habitat present and no further work needed; Habitat Present [HP] - habitat is or may be present. The species may be present.

In addition, the IPaC report lists the following Birds of Conservation Concern as potentially occurring in the vicinity of the Project Impact Area either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in the project location (Figure 1). The list does not include every bird that may be found in this location, nor is it a guarantee that every bird on this list will be found in the Project Impact Area. The general, range-wide breeding season for each species is listed in Table 2, indicating that the bird may breed in vicinity of the Project Impact Area sometime within the timeframe specified. "Breeds elsewhere" indicates that the bird does not likely breed in the area.

Table 2. USFWS Birds of Conservation Concern or Special Status species potentially occurring or known to occur in the Project Area.

Common Name	Scientific Name	Potential Breeding status in the Project Area	2022 eBird sightings within 0.5 mile of BSAs?
Allen's Hummingbird	<i>Selasphorus sasin</i>	Breeds Feb 1 to Jul 15	Yes
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Breeds Jan 1 to Aug 31	Yes
Belding's Savannah Sparrow	<i>Passerculus sandwichensis beldingi</i>	Breeds Apr 1 to Aug 15	No
Bullock's Oriole	<i>Icterus bullockii</i>	Breeds Mar 21 to Jul 25	Yes
California Gull	<i>Larus californicus</i>	Breeds Mar 1 to Jul 31	Yes
California Spotted Owl	<i>Strix occidentalis occidentalis</i>	Breeds Mar 10 to Jun 15	Yes
California Thrasher	<i>Toxostoma redivivum</i>	Breeds Jan 1 to Jul 31	No

Common Name	Scientific Name	Potential Breeding status in the Project Area	2022 eBird sightings within 0.5 mile of BSAs?
Clark's Grebe	<i>Aechmophorus clarkia</i>	Breeds Jun 1 to Aug 31	Yes
Common Yellowthroat	<i>Geothlypis trichas sinuosa</i>	Breeds May 20 to Jul 31	Yes
Golden Eagle	<i>Aquila chrysaetos</i>	Breeds Jan 1 to Aug 31	Yes
Long-eared Owl	<i>Asio otus</i>		Yes
Lawrence's Goldfinch	<i>Carduelis lawrencei</i>	Breeds Mar 20 to Sep 20	Yes
Marbled Godwit	<i>Limosa fedoa</i>	Breeds elsewhere	Yes
Nuttall's Woodpecker	<i>Picoides nuttallii</i>	Breeds Apr 1 to Jul 20	Yes
Oak Titmouse	<i>Baeolophus inornatus</i>	Breeds Mar 15 to Jul 15	Yes
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Breeds May 20 to Aug 31	Yes
Short-billed Dowitcher	<i>Limnodromus griseus</i>	Breeds elsewhere	No
Western Grebe	<i>Aechmophorus occidentalis</i>	Breeds Jun 1 to Aug 31	Yes
Willet	<i>Tringa semipalmata</i>	Breeds elsewhere	Yes
Wrentit	<i>Chamaea fasciata</i>	Breeds Mar 15 to Aug 10	Yes

4. RESULTS: BIOLOGICAL RESOURCES; DISCUSSION OF IMPACTS; AND MITIGATION

No National Wildlife Refuge Lands, fish hatcheries, or Critical Habitats were identified in the BSAs.

4.1. Habitats and Natural Communities of Special Concern

Habitats are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status plants or animals occurring on site. Vegetative community types in the BSAs are human related or non-vegetative: Urban or Built up and Agriculture (Caltrans n.d.). There are no natural communities of special concern in the Project Area.

4.2. Special Status Plant Species

Plants are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on site. There was no suitable habitat observed for special status plant species within the BSAs.

4.3. Special Status Animal Species

Animals are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status animals occurring on site. There was no suitable habitat identified for any FESA-listed species with potential to occur in the BSAs. CNDDDB search results identified one species of concern with potential to occur in the Project Area, the foothill yellow-legged frog. The BSAs were also evaluated for potential suitable habitat for the California red-legged frog and Swainson's hawk based on conversations with the Caltrans biologist (G. Pera, pers. comm.).

4.3.1. Foothill yellow-legged frog

The foothill yellow-legged frog, north coast Distinct Population Segment, is a state Species of Special Concern. It is the only species for which habitat is mapped in CNDDDB for this Project. According to CNDDDB, the entire Rutherford USGS 7.5-minute Quadrangle map is considered yellow-legged frog habitat, but there is no suitable breeding habitat for this species within the Project Impact Area. There are no recorded occurrences in CNDDDB within one mile of the Project Impact Area, but there are several recorded instances within three miles of the Project.

4.3.1.1. Survey Results

No suitable breeding habitat for the foothill yellow-legged frog was identified during the field survey (WSP 2021; Appendix 1).

4.3.1.2. Project Impacts

There are no flowing streams and rivers with rocky substrate or sunny banks in the either BSA, thus there will be no direct impacts to suitable foothill yellow-legged frog breeding habitat.

Direct impacts to dispersing or migrating foothill yellow-legged frogs was considered because there are recorded instances of this species within three miles of the Project Area (CNDDDB 2022). Based on the *Considerations for Conserving the Foothill Yellow-Legged Frog*, adult frogs congregate at breeding sites during the reproductive season and then disperse following reproductive activity (CDFW 2018). Seasonal movements occur among breeding, post breeding summer, and overwintering habitats. Movement data on foothill yellow-legged frogs is limited to a few studies at this time; but it is likely that frogs are more mobile than commonly believed and likely utilize a wide range of watershed features including different order tributaries (CDFW 2018). Foothill yellow-legged frog upland habitat use, and movement are poorly understood; however, anecdotal observations suggest that foothill yellow-legged frogs utilize upland habitat in relative proximity to streams, particularly in more mesic parts of California (CDFW 2018). There are no watershed features in either BSA that would provide suitable dispersal corridors for this species, thus there will be no direct impacts to dispersing or migrating foothill yellow-legged frogs as a result of Project activities.

4.3.1.3. Avoidance and Minimization Efforts

Site inspections for this species are recommended prior to conducting work. If frogs in any life stage are found during inspections, work should be suspended, and the project proponent should notify CDFW for the purpose of developing coordinated conservation measures prior to recommencing work (CDFW 2018).

4.3.2. California Red-Legged Frog

The California red-legged frog is listed under FESA and CESA as Threatened. Impacts to the California red-legged frog were considered based on discussions with the Caltrans biologist on June 29, 2022. There are no recorded occurrences of this species recorded in CNDDDB within 3 miles of the Project Area.

4.3.2.1. Survey Results

No suitable breeding habitat for the California red-legged frog was identified in the BSAs during the field survey (WSP 2021; Appendix 1).

4.3.2.2. Project Impacts

There are no flowing streams and rivers with rocky substrate or sunny banks in the vicinity of the Project Area, thus there will be no direct impacts to suitable breeding habitat in the Project Area.

According to the *Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (USFWS 2005), California red-legged frogs may move up to 3 kilometers (1.88 miles) up or down drainages and are known to wander throughout riparian woodlands up to several dozen meters from the water (Rathbun et al. 1993). Dispersal distances are considered to be dependent on habitat availability and environmental conditions. On rainy nights, California red-legged frogs may roam away from aquatic sites as much as 1.6 kilometers (1 mile). Additionally, California red-legged frogs will sometimes disperse in response to receding water which often occurs during the driest time of the year (USFWS 2005). Direct impacts to breeding, dispersing, or migrating California red-legged frogs are unlikely since there is no suitable habitat in the Project Impact Area. There are no recorded instances of this species within three miles of the Project Area (CNDDDB 2022).

4.3.2.3. Avoidance and Minimization Efforts

Site inspections for this species are recommended prior to conducting work. If frogs in any life stage are found during inspections, work should be suspended, and the project proponent should notify CDFW for the purpose of developing coordinated conservation measures prior to recommencing work (CDFW 2018).

4.3.3. Swainson's Hawk

Swainson's hawks are a state threatened species and are protected under the MBTA and CFGC §§ 3503, 3503.5, and 3800 that prohibit the take, possession, or destruction of birds, their nests, or eggs. According to CNDDDB, there was one known Swainson's hawk nest that was recorded in 2013 approximately 0.5 mile from SR-29 at latitude 38.451154° North, longitude -122.404451° West along the Napa River approximately 1 mile from both Rutherford and Oakville intersections (CNDDDB 2022). It appears that the nest tree could be within direct line of sight from SR-29 along Glos Lane.

The BSAs contain suitable foraging habitat for Swainson's hawks. There are suitable nesting trees within both BSAs.

4.3.3.1. Survey Results

There were no raptor nests observed in the BSAs during the field survey. The project will not impact any suitable raptor nesting trees.

4.3.3.2. Project Impacts

The CNDDDB-mapped Swainson's hawk nest datum is nearly a decade old. There were no Swainson's hawks nor unoccupied raptor nests observed in the BSAs during the September 2021 field survey (WSP 2021; Appendix 1). In addition, the project will not impact any suitable raptor nesting trees. Therefore, direct impacts to nesting Swainson's hawks are not anticipated as a result of Project activities.

4.3.3.3. Avoidance and Minimization Efforts

If an active Swainson's hawk nest is identified within 0.5 mile of the Project Area, the following conservation measures are recommended to avoid and minimize impacts to nesting Swainson's Hawk (CDFW 2013):

- If construction activities occur between February 1 and September 30, surveys for Swainson's hawk in accordance with the current CDFW guidance, e.g., *Swainson's Hawk Technical Advisory*

Committee 2000 guidelines, are recommended (SHTAC 2000). Surveys will cover a minimum of a 0.5-mile radius around the construction area. If nesting Swainson’s hawks are detected, CDFW will establish a 0.5-mile no disturbance buffer. Buffers will be maintained until a qualified CDFW biologist has determined that the young have fledged and are no longer reliant upon the nest or parental care for survival.

If potential nesting trees are to be removed during construction activities, the following conservation measures are recommended (CDFW 2013):

- Removal will take place outside of Swainson’s hawk and nesting season and CDFW will be consulted to determine if nest trees should be replaced offsite. If replacement planting is implemented, monitoring will be conducted annually for 5 years to assess the mitigation’s effectiveness. The performance standard for the mitigation will be 65% survival of all replacement plantings.

5. CONCLUSIONS AND REGULATORY DETERMINATIONS

5.1. Federal Endangered Species Act Consultation Summary

A USFWS list of species potentially occurring within the Project Area was obtained from the IPaC online tool on March 3, 2023. Caltrans has determined, in accordance with Section 7 of the Endangered Species Act, that the project will have No Effect on any federal-listed animal or plant species (Table 3). This project is located outside of NOAA Fisheries jurisdiction; therefore, a NOAA Fisheries species list is not required and no effects to NOAA Fisheries species are anticipated.

Table 3. Effect Determinations for FESA-listed species

Common Name	Scientific Name	Status ¹	Effect Determination
Clara Hunt's Milk-vetch	<i>Astragalus clarianus</i>	FE	No Effect
Northern spotted owl	<i>Strix occidentalis caurina</i>	FT	No Effect
Green sea turtle	<i>Chelonia mydas</i>	FE	No Effect
California red-legged Frog	<i>Rana draytonii</i>	FT	No Effect
Monarch butterfly	<i>Danaus plexippus</i>	FC	No Effect
California freshwater shrimp	<i>Syncaris pacifica</i>	FE	No Effect

¹ Status: Federal Endangered (FE); Federal Threatened (FT); Federal Candidate (FC); Federal Species of Concern (FSC)

5.1. California Endangered Species Act Consultation Summary

Caltrans has determined, in accordance with the California Endangered Species Act, that the project will result in No Take of any state-listed or Candidate animal or plant species.

5.2. Invasive Species

There were no invasive species observed in either BSA during the 2021 field survey (WSP 2021; Appendix 1).

Exclusion, early detection, and rapid response are by far the most cost-effective strategies to deal with undesirable invaders. Regular inspections of the Project Impact Area are recommended to find invasions before permanent establishment occurs and take steps to eradicate incipient populations of undesirable species.

5.3. Other

5.3.1. Wetlands and Other Waters Coordination Summary

There are no jurisdictional waters or wetlands present within the Project Impact Area. No waters of the United States will be affected by the project. Therefore, no coordination with the USACE will be required, and no CWA Section 404 permit will be required, and no CWA Section 401 permit will be required from the Regional Water Quality Control Board. No waters of the state will be affected by the project. Therefore, no 1600 permit will be required from CDFW.

5.3.2. Migratory Birds

There were no migratory bird nests observed during the 2021 field survey (WSP 2021; Appendix 1). There were incidental observations of Steller's jay, acorn woodpecker, and red shouldered hawk.

The following measures should be taken in order to avoid impacts to nesting birds and comply with the MBTA and CFGC Sections 3503 and 3503.5 (protection of birds' nests) and 3513 (taking Migratory Bird Treaty Act birds):

- *Pre-construction/Pre-disturbance Surveys for Nesting Birds.* If vegetation clearing occurs during nesting season for migratory birds (approximately February 1 through September 30), pre-construction surveys for nesting birds will be conducted by a qualified biologist to ensure that no nests will be disturbed during project implementation. These surveys will be conducted no more than 48 hours prior to the initiation of project activities. During this survey, a qualified biologist will inspect all potential nesting habitats (e.g., trees, shrubs, grasslands, and buildings) within 300 feet of impact areas for raptor nests and within 100 feet of impact areas for nests of non-raptors.
- *Buffers around Active Nests.* If an active nest (i.e., a nest with eggs or young, or any completed raptor nest attended by adults) is found sufficiently close to work areas to be disturbed by these activities, the biologist, in consultation with CDFW, will determine the extent of a disturbance-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that no nests of species protected by the MBTA and CFGC will be disturbed during project implementation. Because the majority of the BSA is already subject to disturbance by vehicles and pedestrians, activities that will be prohibited from occurring within the buffer zone around a nest will be determined on a case-by-case basis. In general, activities prohibited within such a buffer while a nest is active will be limited to new construction-related activities (i.e., activities that were not ongoing when the nest was constructed) involving significantly greater noise, human presence, or vibrations than were present prior to nest initiation.

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APPENDIX 1

MEMORANDUM: Site Reconnaissance for
Biological Resources for the SR-29 Project





Memorandum

To: MTC

From: Erin Bench, Senior Biologist, WSP USA Inc.

Date: October 8, 2021

Subject: Site Reconnaissance for Biological Resources for the SR-29 Project

cc: Stephanie Whitmore, WSP USA Inc.

On behalf of Metropolitan Transportation Commission (MTC), WSP USA Inc. (WSP) prepared this memorandum detailing results of a site reconnaissance survey focused on biological resources within the proposed SR-29 & Rutherford Road Intersection and SR-29 and Oakville Road Intersection Project (Project) Areas (see Attachment A and Attachment B).

This reconnaissance survey provides a summary of current site conditions with respect to biological resources.

Introduction

State Route 29 (SR-29) (St. Helena Highway) in the communities of Rutherford, Oakville, and Yountville in the County of Napa, California is a key route providing north/south connectivity within Napa Valley. This section of corridor regularly experiences heavy traffic congestion during the peak periods.

In partnering with the Napa Valley Transportation Authority (NVTA), MTC performed a traffic operations analysis to identify the causes of and potential solutions to congestion in the greater project vicinity. The results indicate constructing roundabouts or traffic signals at the intersections of SR-29 & Rutherford Road and SR-29 & Oakville Cross Road would improve multimodal performance along SR-29.

A preliminary traffic operations analysis was presented to Project stakeholders. Based on the feedback received, the compact roundabout options would be strong candidates to advance into the project

development and environmental review process. The preferred alternative that proceeds to 65% design, final design, and beyond will be determined through a series of ongoing stakeholder engagements.

The proposed project will provide operational and safety improvements in the form of roundabouts along the SR-29 corridor at the intersections of Rutherford Rd. and Oakville Cross Rd. The improvements will relieve traffic congestion that plagues the corridor during peak commute periods and during the weekends. The intersection improvements will improve safety and corridor operation and provide multimodal access. The project also includes the intersection of Madison St. as an option.

Study Methods

A Biological Study Area (BSA) was identified for each intersection by the biologist prior to a field visit. These BSA's were determined utilizing preliminary project plans and covered all areas of potential impact. A reconnaissance survey was conducted on September 9, 2021, by one field biologist familiar with the region where the Project is located. A survey was performed at both intersections within the previously identified BSA. This included 1.98 acres within the SR-29 & Oakville Cross Rd intersection and adjacent railroad right-of-way, and 1.62 acres within the SR-29 & Rutherford Rd intersection and adjacent railroad right-of-way. Representative site photos and BSA's for the SR-29 & Oakville Cross Rd and SR-29 & Rutherford Rd intersections can be found in Attachment A and Attachment B, respectively.

The site reconnaissance survey entailed traversing the BSA's by foot to generally characterize the current site conditions at each intersection. The biologist walked meandering transects throughout the BSA's to investigate for sensitive plants, birds and other biological resources. Additionally, the biologist scanned nearby adjacent land using binoculars to identify any biological resources. These surveys were performed with the intent of support permitting, pre-construction monitoring, compliance with mitigation measures, or other agency-required analyses.

No waterbodies are within the BSA's of the project, and the proposed Project does not require the discharge or release of any fill materials into wetlands, watercourses or other bodies of water. Applicable regulatory requirements relevant to the project include compliance with the Migratory Bird Treaty Act. This treaty prohibits the take (including killing, capturing, selling, trading and transport) of protected migratory bird species without prior authorization by the Department of the Interior U.S. Fish and Wildlife Service (fws.gov). The law applies to the removal of nests occupied by migratory birds during the breeding season. California Fish and Game Code Sections 3503 and 3503.5 (protection of birds' nests) and 3513 (taking Migratory Bird Treaty Act birds) also prohibit the destruction of any nest, egg, or nestling. A nesting bird survey was not performed during the reconnaissance survey. Due to the presence of trees in the area that could provide nesting areas for raptors and other birds of prey, a nesting survey should be performed before any Project construction begins to limit impacts to nesting birds.

WSP conducted a desktop database review to identify historical records of special status plant and wildlife species in the proposed Project Areas, and to determine if whether the species have the potential to occur today. The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) (Appendix A) planning tool and the California Natural Diversity Database (CNDDDB, September 2021) (Appendix B) were reviewed to identify any species or biological resources requiring consideration. Additionally, the California Native Plant Society (CNPS) Calscape database was reviewed

to identify native plants of potential concern, and a National Wetlands Inventory search (Appendix C & D) was performed to identify any wetlands within the Project Areas.

The resources investigated during the September 2021 survey effort included: land cover/land use, suitable habitat for migratory birds, raptor nests, and habitat for other special status species. Temperatures during the survey ranged from 62-70 degrees Fahrenheit, with little cloud coverage and winds of less than 5 mile per hour. There were no recent rain events leading up to the survey.

Environmental Setting

The Project is located in Napa Valley, California, located in southern Napa County and is surrounded by agricultural areas to the north, Vaca and Mayacamas Mountains to the east and west, and San Pablo Bay to the south. The nearby Napa River flows from north to south through the City of Napa to San Pablo Bay. SR-29 is one of several state routes that provide regional access to the cities and surrounding regions. The distance between the two SR-29 intersections under study is approximately 2 miles.

The SR-29 & Oakville Cross Road intersection is located approximately 40 miles north of San Francisco as the crow flies and straddles SR-29 in the heart of Napa Valley between the towns of Rutherford and Yountville. The Napa Valley Wine Trail railroad right-of-way runs parallel to SR-29 north to south on the western side of the BSA alongside the Oakville Pump Service station. The historic Oakville Grocery sits on the northeastern corner of the BSA, adjacent to a vineyard, with several wineries on the eastern side of SR-29.

There is minimal natural vegetation within the BSA at the Oakville Cross Road intersection. Along the western side of the railroad right of way is a stand of mixed tree species, including old growth coast redwoods, mixed oak species, and eucalyptus species. The northeastern portion of the BSA is a vineyard with no ground vegetation. Ornamental and native plants were planted in established planters alongside the winery sidewalks on the eastern side of SR-29. Plants included large palms, bush poppies, lavender, and oleander shrubs. Ground vegetation in vineyards adjacent to SR-29 in the road and railroad rights-of-way had been cleared, most likely to limit vegetation fuel for fires. There are no streams, wetlands, or other bodies of water within the BSA at the Oakville Cross Road & SR-29 intersection.

The SR-29 & Rutherford Road intersection is located approximately 45 miles north of San Francisco as the crow flies and straddles SR-29 between the towns of Zinfandel and Oakville. The immediate vicinity around the intersection is a mostly built environment, with FedEx and United States Postal Service facilities on the northeastern corner of the intersection. Wineries and restaurants abut both SR-29 and Rutherford Road on the southeastern side of the BSA. The Rutherford Fire Department sits on the western side of the Napa Valley Wine Train railroad right-of-way which runs parallel to SR-29. A vineyard lies on the southwestern portion of the intersection on the western side of the railroad right-of-way.

There is minimal natural vegetation within the BSA at the Rutherford Road intersection. Along the western side of the railroad right-of-way is a stand of mixed tree species, including old growth coast redwoods, eucalyptus and mixed oak. A stand of oak and palm trees line the northeastern portion of the BSA along SR-29 and Rutherford Road. Ornamental bush poppies and oleander shrubs line SR-29 and Rutherford Road along the southeastern side of the BSA. Ground vegetation in vineyards adjacent to SR-29 in the road and railroad rights-of-way had been cleared, most likely to limit vegetation fuel for fires.

There are no streams, wetlands, or other bodies of water within the BSA at the Rutherford Road & SR-29 intersection.

Regional Species and Habitats and Natural Communities of Concern

The USFWS IPaC planning tool identified several species that may be impacted by project activities.

Table 1: IPaC Planning Tool Results below outlines these species, their conservation status, and their potential to exist within the Project Areas:

Table 1: IPaC Planning Tool Results		
Migratory Birds	Breeding Season	Conservation Status
California Spotted Owl (<i>Strix occidentalis occidentalis</i>)	Breeds Mar 10 to Jun 15	USFWS Bird of Conservation Concern
California Thrasher (<i>Toxostoma redivivum</i>)	Breeds Jan 1 to Jul 31	USFWS Bird of Conservation Concern
Clark's Grebe (<i>Aechmophorus clarkia</i>)	Breeds Jun 1 to Aug 31	USFWS Bird of Conservation Concern
Common Yellowthroat (<i>Geothlypis trichas sinuosa</i>)	Breeds May 20 to Jul 31	USFWS Bird of Conservation Concern
Golden Eagle (<i>Aquila chrysaetos</i>)	Breeds Jan 1 to Aug 31	Not a BCC, but warrants attention due to the Eagle Act
Lawrence's Goldfinch (<i>Carduelis lawrencei</i>)	Breeds Mar 20 to Sept 20	USFWS Bird of Conservation Concern
Marbled Godwit (<i>Limosa fedoa</i>)	Breeds elsewhere	USFWS Bird of Conservation Concern
Nuttall's Woodpecker (<i>Picoides nuttallii</i>)	Breeds Apr 1 to Jul 20	USFWS Bird of Conservation Concern
Oak Titmouse (<i>Baeolophus inornatus</i>)	Breeds Mar 15 to Jul 15	USFWS Bird of Conservation Concern
Olive-sided Flycatcher (<i>Contopus cooperi</i>)	Breeds May 20 to Aug 31	USFWS Bird of Conservation Concern
Short-billed Dowitcher (<i>Limnodromus griseus</i>)	Breeds elsewhere	USFWS Bird of Conservation Concern
Willet (<i>Tringa semipalmata</i>)	Breeds elsewhere	USFWS Bird of Conservation Concern
Wrentit (<i>Chamaea fasciata</i>)	Breeds Mar 15 to Aug 10	USFWS Bird of Conservation Concern
Birds	Potential to exist in project area	Conservation Status
Northern Spotted Owl (<i>Strix occidentalis caurina</i>)	Highly unlikely – no suitable habitat	Threatened
Reptiles		
Green Sea Turtle (<i>Chelonia mydas</i>)	Highly unlikely – no suitable habitat	Threatened
Amphibians		
California Red-legged Frog (<i>Rana draytonii</i>)	Unlikely – no suitable habitat	Threatened
Fishes		

Delta Smelt (<i>Hypomesus transpacificus</i>)	Highly unlikely – no suitable habitat	Threatened
Insects		
Monarch Butterfly (<i>Danaus plexippus</i>)	Unlikely – lack of milkweed habitat	Candidate Species
Crustaceans		
California Freshwater Shrimp (<i>Syncaris pacifica</i>)	Highly unlikely – no suitable habitat	Endangered
Flowering plants		
Clara Hunt's Milk-vetch (<i>Astragalus clarianus</i>)	Unlikely – no suitable habitat	Endangered

Additionally, no National Wildlife Refuge Lands, fish hatcheries, or Critical Habitats were identified in the Project BSA's.

CNDDDB search results identified one species of concern, the foothill yellow-legged frog (*Rana boylei*). The BSA's are void of suitable habitat for this species so their potential to exist within the Project Areas are highly unlikely.

Results: Biological Resources, Discussion of Impacts and Mitigation

Based on the preliminary roadway plans, there will be no take of large trees or foliage along SR-29 and the adjacent railroad right-of-way. Environments surrounding both intersections have mostly been previously disturbed and built. Open land outside of the rights-of-way includes agricultural and farmland with a narrow strip of mixed tree species along the railroad right-of-way. Several large tree species exist scattered along SR-29 and could be considered habitat for birds of prey and raptor species. No impacts to these large trees are anticipated from project activities, therefore, potential to impact birds of prey is minimal.

Due to the built environments of the Project Areas, the lack of substantial natural plant communities, and lack of impacts to large trees, impacts to sensitive vegetation is very low. Impacts to sensitive wildlife species of concern are also low due to the lack of suitable habitat for these species. It is unclear whether project activities will impact migratory birds without conducting a nesting bird survey. However, due to lack of suitable nesting vegetation and the assumption that large trees will not be removed by project activities, it is projected that impacts to migratory birds will be low.

Additionally, it is difficult to offer reasonable mitigation suggestions that would limit impacts to environmental resources and wildlife without knowing the full details of the final plans/impacts. Due to this gap in information, the only suggested mitigation at this time is to keep all large trees along SR-29 for birds of prey and raptor species as well as migratory birds who may utilize these trees during migration seasons.

Plant and animal species encountered during the site reconnaissance include: Bush Poppy (*Dendromecon rigida*), California Tree Poppy (*Romneya coulteri*), blue gum (*Eucalyptus globulus*), coast redwood (*Sequoia sempervirens*), oleander shrub (*Nerium oleander*), coast live oak (*Quercus agrifolia*), California fan palm (*Washingtonia filifera*), lavender (*Lavandula spp.*), Stellar's jay (*Cyanocitta stelleri*), acorn woodpecker (*Melanerpes formicivorus*) and red shouldered hawk (*Buteo lineatus*).

References

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Wildlife Service (USFWS). 2021. Information for Planning and Conservation (IPaC). Accessed in September 2021. <http://ecos.fws.gov/ipac/>.

California Department of Fish and Wildlife BIOS for Vegetation Mapping. 2021. Accessed in September 2021. <https://apps.wildlife.ca.gov/bios/?bookmark=940>.

California Native Plant Society (CNPS). 2021. Calscape database review. Accessed in September 2021. <https://calscape.org/>.

National Wetlands Inventory (NWI). 2021. Wetlands Mapper. Accessed in September 2021. <https://www.fws.gov/wetlands/Data/Mapper.html>.

U.S. Fish and Wildlife Service (USFWS). 2021. Migratory Bird Treaty Act. Accessed in September 2021. <https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>.

Attachments and Appendix

Appendix A – Information for Planning and Consultation (IPaC) results

Appendix B – California Natural Diversity Database (CNDDDB) results and map

Appendix C – Oakville Cross Road National Wetlands Inventory results

Appendix D – Rutherford Road National Wetlands Inventory results

Attachment A – Oakville Cross Road Intersection Biological Study Area and Photo Log

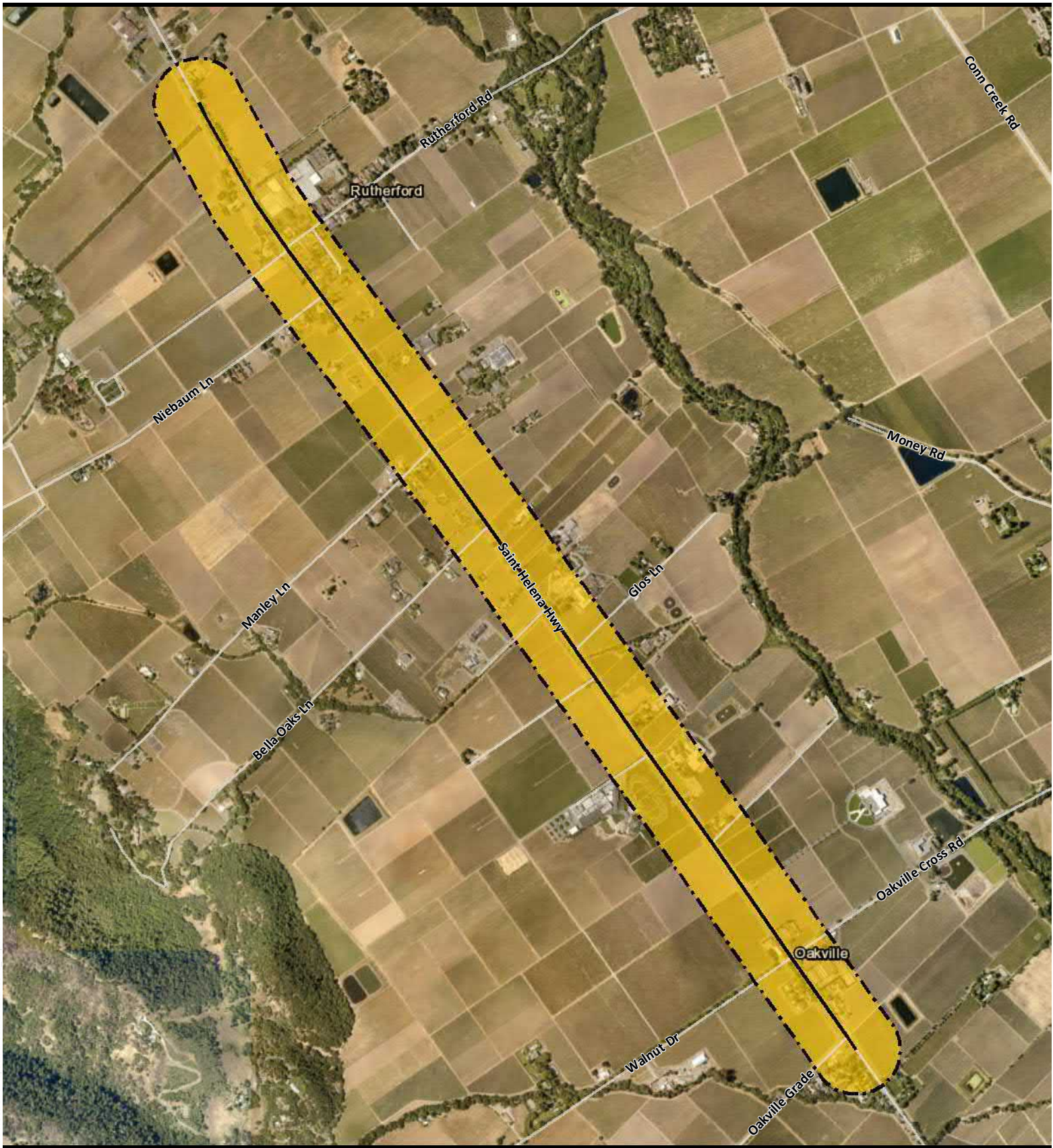
Attachment B – Rutherford Road Intersection Biological Study Area and Photo Log

APPENDIX A

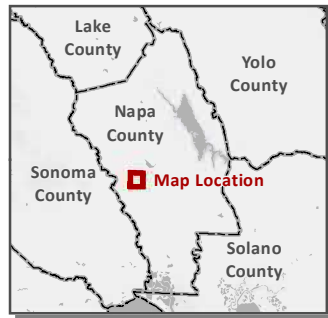
INFORMATION FOR PLANNING AND CONSULTATION (IPAC) RESULTS

APPENDIX B

CALIFORNIA NATURAL DIVERSITY DATABASE
(CNDDDB) RESULTS MAP



L:\PROJECTS\Napa\MAPS\MXD\20210915_Report\CNDDDB.mxd



- Street
- SR-29
- SR-29 Buffer (500 ft)
- CNDDDB Species
- foothill yellow-legged frog

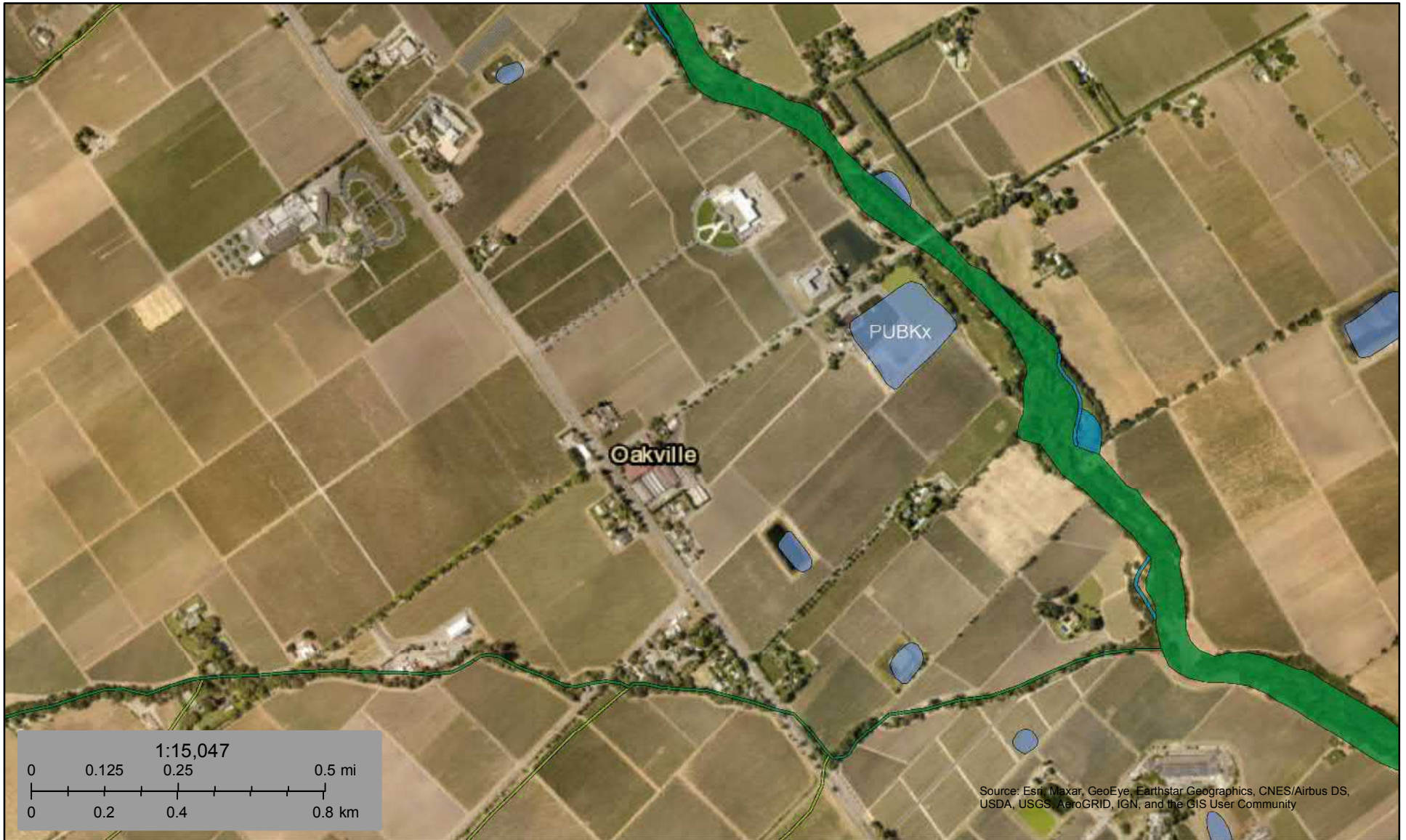
**California Natural Diversity Database (CNDDB)
Species Within 500 ft of SR-29**

Napa County, California
September 15, 2021




APPENDIX C

OAKVILLE CROSS ROAD NATIONAL WETLANDS INVENTORY RESULTS



September 22, 2021

Wetlands

- | | | | | | |
|-------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.






APPENDIX D

RUTHERFORD ROAD NATIONAL WETLANDS INVENTORY RESULTS



September 22, 2021

Wetlands

- | | | | | | |
|-------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

ATTACHMENT A

OAKVILLE & SR-29 INTERSECTION BIOLOGICAL
STUDY AREA AND REPRESENTATIVE PHOTOS



Photo 1: Project site, facing southeast at intersection of SR-29 and Oakville Cross Rd.



Photo 2: Project site, facing west at Oakville Pump Service facility.



Photo 3: Project site, facing south at intersection of SR-29 and Oakville Cross Rd.



Photo 4: Project site, facing northwest.



Photo 5: Project site, facing southeast.



Photo 6: Project site, facing northwest toward SR-29 and Oakville Cross Rd intersection.



Photo 7: Project site, facing west.



Photo 8: Project site, facing south.



Photo 9: Project site, facing north towards intersection of SR-29 and Oakville Cross Rd.



Photo 10: Project site, facing north at intersection of SR-29 and Oakville Cross Rd.



Photo 11: Project site, facing north at railroad right of way at the intersection of SR-29 and Oakville Cross Rd.



Photo 12: Project site, facing northeast from railroad right of way at the intersection of SR-29 and Oakville Cross Rd.



Photo 13: Project site, facing southeast at railroad right of way at the intersection of SR-29 and Oakville Cross Rd.



Photo 14: Project site, facing southeast tree line west of the railroad right of way.

ATTACHMENT B

**RUTHERFORD & SR-29 INTERSECTION BIOLOGICAL
STUDY AREA AND REPRESENTATIVE PHOTOS**



Photo 1: Project site, facing northwest at intersection of SR-29 and Rutherford Rd.



Photo 2: Project site, facing southeast approaching intersection of SR-29 and Rutherford Rd.



Photo 3: Project site, facing east at intersection of SR-29 and Rutherford Rd along railroad right of way.



Photo 4: Project site, facing south at intersection of SR-29 and Rutherford Rd along railroad right of way.



Photo 5: Project site, facing west at old growth Eucalyptus along SR-29 near Rutherford Rd intersection.



Photo 6: Project site, facing northeast at Rutherford Rd.



Photo 7: Project site, facing southwest at Rutherford Rd.



Photo 8: Project site, facing southwest at intersection of SR-29 and Rutherford Rd.



Photo 9: Project site, facing east toward Napa Wine Train on SR-29 approaching Rutherford Rd.



Photo 10: Project site, facing east toward Rutherford Fire Department station on SR-29 approaching Rutherford Rd and SR-29 intersection.

APPENDIX 2

California Native Plant Society's (CNPS)
Inventory of Rare and Endangered
Plants Database






[CNPS Rare Plant Inventory](#)

Search Results

7 matches found. Click on scientific name for details

Search Criteria: [CRPR](#) is one of [1B:2B] [Fed List](#) is one of [FE:FT] and [State List](#) is one of [CE:CT] , [County](#) is one of [NAP]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
Astragalus claranus	Clara Hunt's milk-vetch	Fabaceae	annual herb	Mar-May	FE	CE	G1	S1	1B.1	No Photo Available
Castilleja affinis var. neglecta	Tiburon paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Jun	FE	CT	G4G5T1T2	S1S2	1B.2	No Photo Available
Lasthenia burkei	Burke's goldfields	Asteraceae	annual herb	Apr-Jun	FE	CE	G1	S1	1B.1	 © 2015 Neal Kramer
Limnanthes vinculans	Sebastopol meadowfoam	Limnanthaceae	annual herb	Apr-May	FE	CE	G1	S1	1B.1	 © 2015 Vernon Smith
Navarretia leucocephala ssp. pauciflora	few-flowered navarretia	Polemoniaceae	annual herb	May-Jun	FE	CT	G4T1	S1	1B.1	 © 2013 Jake Ruygt
Plagiobothrys strictus	Calistoga popcornflower	Boraginaceae	annual herb	Mar-Jun	FE	CT	G1	S1	1B.1	No Photo Available
Poa napensis	Napa blue grass	Poaceae	perennial herb	May-Aug	FE	CE	G1	S1	1B.1	No Photo Available

Showing 1 to 7 of 7 entries

Suggested Citation:

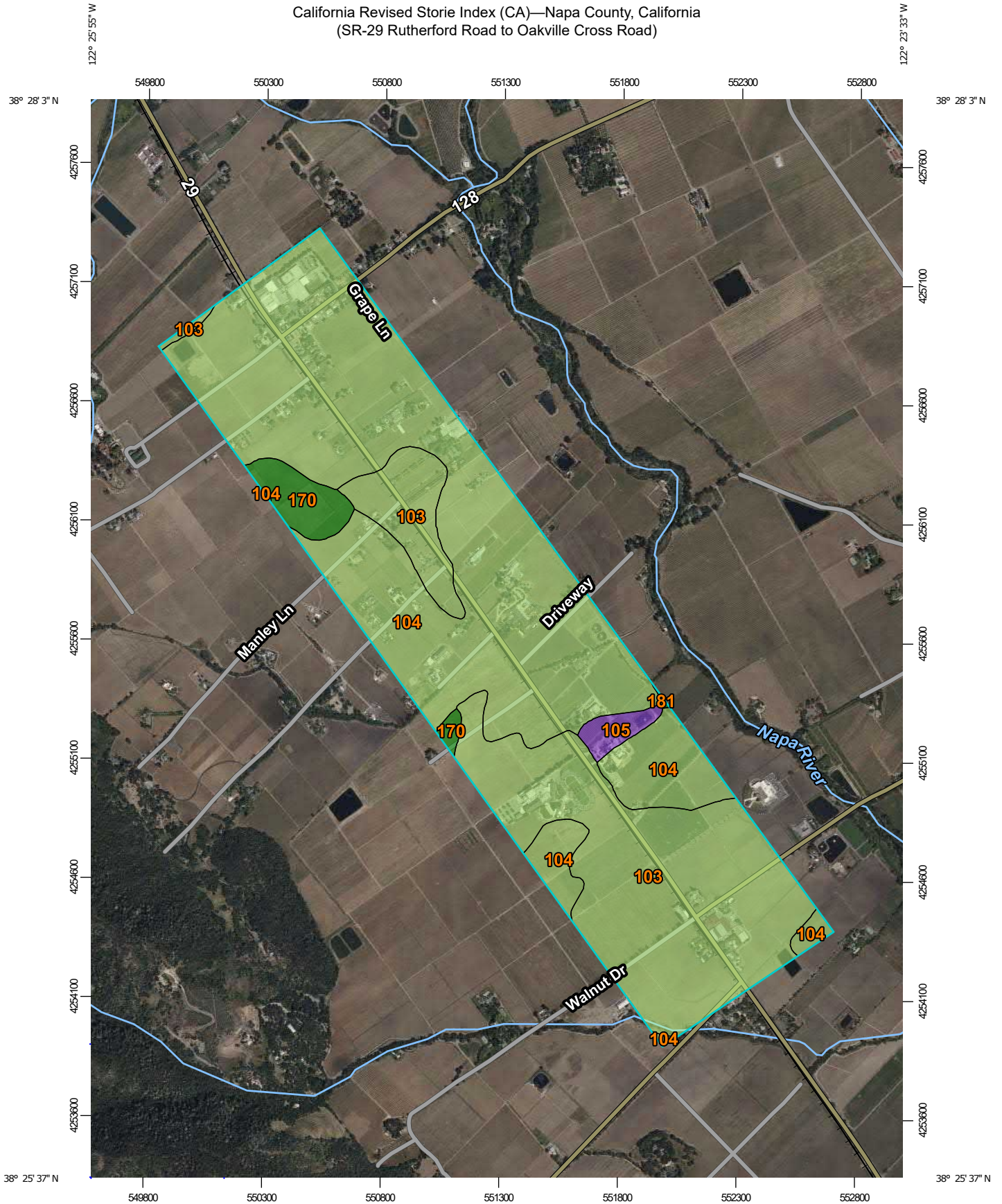
California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website <https://www.rareplants.cnps.org> [accessed 19 September 2022].

APPENDIX 3

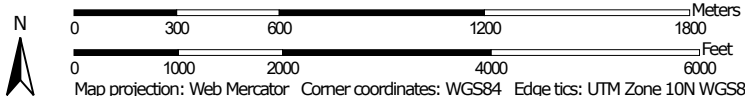
NRCS Web Soil Survey



California Revised Storie Index (CA)—Napa County, California
(SR-29 Rutherford Road to Oakville Cross Road)



Map Scale: 1:22,100 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84




Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

10/4/2022
Page 1 of 4









MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils





Soil Rating Polygons





-  Grade 1 - Excellent
-  Grade 2 - Good
-  Grade 3 - Fair
-  Grade 4 - Poor
-  Grade 5 - Very Poor
-  Grade 6 - Nonagricultural
-  Not rated
-  Not rated or not available

Soil Rating Lines


-  Grade 1 - Excellent
-  Grade 2 - Good
-  Grade 3 - Fair
-  Grade 4 - Poor
-  Grade 5 - Very Poor
-  Grade 6 - Nonagricultural
-  Not rated
-  Not rated or not available

Soil Rating Points






-  Grade 1 - Excellent
-  Grade 2 - Good
-  Grade 3 - Fair
-  Grade 4 - Poor

-  Grade 5 - Very Poor
-  Grade 6 - Nonagricultural
-  Not rated
-  Not rated or not available


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California
Survey Area Data: Version 15, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 26, 2022—Apr 25, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

California Revised Storie Index (CA)

Map unit symbol	Map unit name	Rating	Component name (percent)	Acres in AOI	Percent of AOI
103	Bale loam, 0 to 2 percent slopes	Grade 2 - Good	Bale (85%)	269.5	34.9%
104	Bale clay loam, 0 to 2 percent slopes	Grade 2 - Good	Bale (85%)	469.2	60.7%
105	Bale clay loam, 2 to 5 percent slopes	Grade 3 - Fair	Bale (85%)	9.7	1.3%
170	Pleasanton loam, 0 to 2 percent slopes, MLRA 14	Grade 1 - Excellent	Pleasanton (85%)	23.6	3.1%
181	Yolo loam, 0 to 10 percent slopes, moist, MLRA 14	Grade 1 - Excellent	Yolo, moist (85%)	0.4	0.0%
Totals for Area of Interest				772.5	100.0%

Description

The Revised Storie Index is a rating system based on soil properties that govern the potential for soil map unit components to be used for irrigated agriculture in California.

The Revised Storie Index assesses the productivity of a soil from the following four characteristics:

- Factor A: degree of soil profile development
- Factor B: texture of the surface layer
- Factor C: steepness of slope
- Factor X: drainage class, landform, erosion class, flooding and ponding frequency and duration, soil pH, soluble salt content as measured by electrical conductivity, and sodium adsorption ratio

Revised Storie Index numerical ratings have been combined into six classes as follows:

- Grade 1: Excellent (81 to 100)
- Grade 2: Good (61 to 80)
- Grade 3: Fair (41 to 60)
- Grade 4: Poor (21 to 40)
- Grade 5: Very poor (11 to 20)
- Grade 6: Nonagricultural (10 or less)

The components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as the one shown for the map unit. The percent composition of each component in a particular map unit is given to help the user better understand the extent to which the rating applies to the map unit.

Other components with different ratings may occur in each map unit. The ratings for all components, regardless the aggregated rating of the map unit, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

APPENDIX 4

USFWS Information for Planning and
Consultation (IPaC) Report



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

Caltrans State Route-29 Intersection Improvements

LOCATION

Napa County, California





DESCRIPTION

Improvements to the operation and safety of State Route-29 at the intersections of Oakville Cross Road and Rutherford Road.)

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:

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

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), 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:

Birds

NAME	STATUS
<p>Northern Spotted Owl <i>Strix occidentalis caurina</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/1123</p>	Threatened

Reptiles

NAME	STATUS
<p>Green Sea Turtle <i>Chelonia mydas</i></p> <p>No critical habitat has been designated for this species.</p> <p>https://ecos.fws.gov/ecp/species/6199</p>	Threatened

Amphibians

NAME	STATUS
<p>California Red-legged Frog <i>Rana draytonii</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/2891</p>	Threatened

Insects

NAME	STATUS
------	--------

Monarch Butterfly *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

Crustaceans

NAME

STATUS

California Freshwater Shrimp *Syncaris pacifica*

Endangered

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/7903>

Flowering Plants

NAME

STATUS

Clara Hunt's Milk-vetch *Astragalus clarianus*

Endangered

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/3300>

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 Act¹ and the Bald and Golden Eagle Protection Act².

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 [below](#).

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 <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (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 [below](#). 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 [E-bird data mapping tool](#) (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 [below](#).

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.

NAME	BREEDING SEASON
Allen's Hummingbird <i>Selasphorus sasin</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15

<p>Bald Eagle <i>Haliaeetus leucocephalus</i> 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.</p>	<p>Breeds Jan 1 to Aug 31</p>
<p>Belding's Savannah Sparrow <i>Passerculus sandwichensis beldingi</i> 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/8</p>	<p>Breeds Apr 1 to Aug 15</p>
<p>Bullock's Oriole <i>Icterus bullockii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	<p>Breeds Mar 21 to Jul 25</p>
<p>California Gull <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	<p>Breeds Mar 1 to Jul 31</p>
<p>California Thrasher <i>Toxostoma redivivum</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	<p>Breeds Jan 1 to Jul 31</p>
<p>Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	<p>Breeds Jun 1 to Aug 31</p>
<p>Common Yellowthroat <i>Geothlypis trichas sinuosa</i> 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</p>	<p>Breeds May 20 to Jul 31</p>

Golden Eagle *Aquila chrysaetos*

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/1680>

Breeds Jan 1 to Aug 31

Long-eared Owl *asio otus*

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

<https://ecos.fws.gov/ecp/species/3631>

Breeds Mar 1 to Jul 15

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

Olive-sided Flycatcher *Contopus cooperi*

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

<https://ecos.fws.gov/ecp/species/3914>

Breeds May 20 to Aug 31

Western Grebe *aechmophorus occidentalis*

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

<https://ecos.fws.gov/ecp/species/6743>

Breeds Jun 1 to Aug 31

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

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.

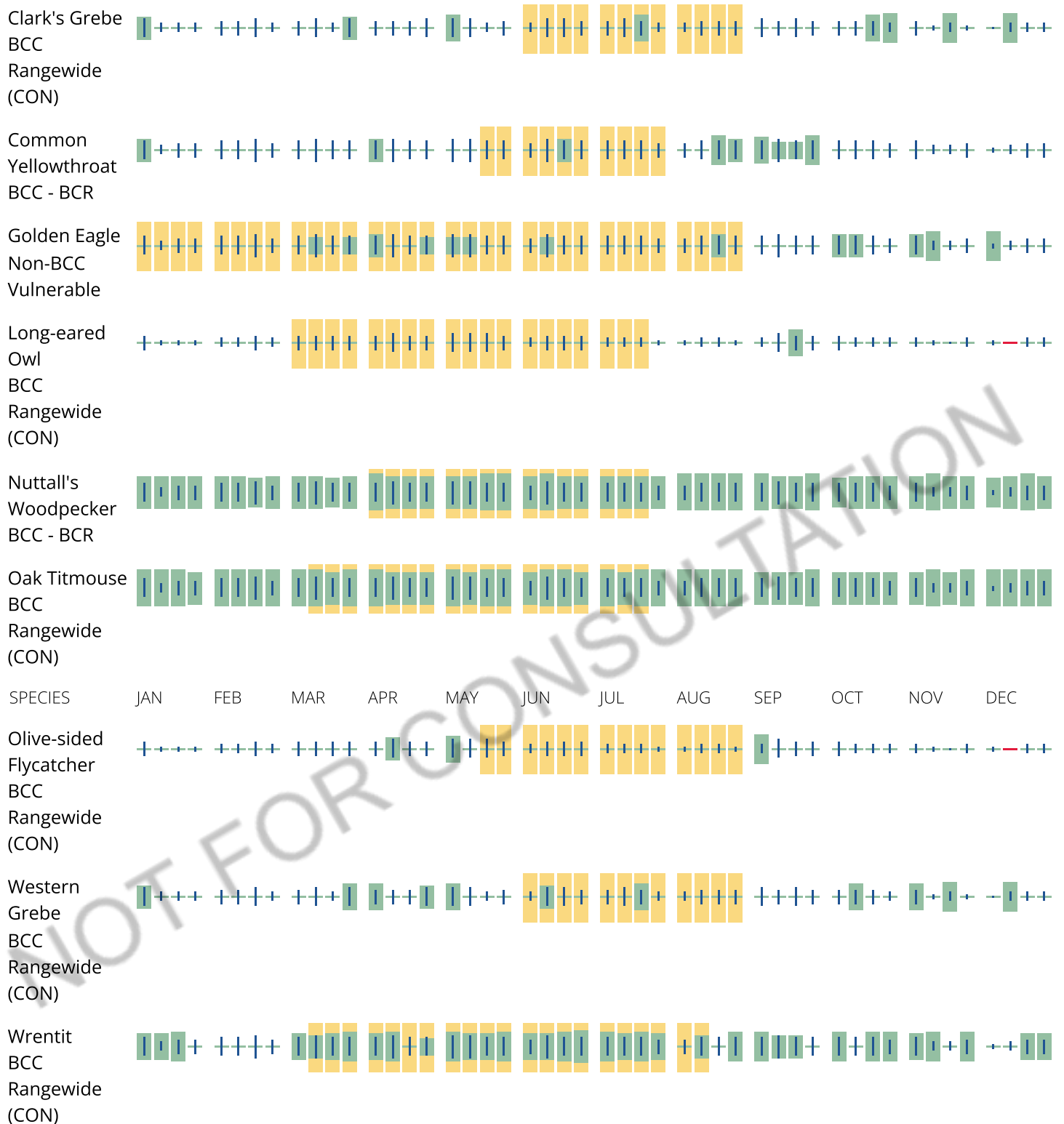
How is the probability of presence score calculated? The calculation is done in three steps:

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 $0.05/0.25 = 0.2$.
3. 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.



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](#) 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 list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) 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 [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) 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 ([Eagle Act](#) 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 [Rapid Avian Information Locator \(RAIL\) Tool](#).

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 [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

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 or migrating in my 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 query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. 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 [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the

Virgin Islands);

2. "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 [Eagle Act](#) 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 [Northeast Ocean Data Portal](#). 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 [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) 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 [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) 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 [National Wildlife Refuge](#) 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 (NWI)

Impacts to [NWI wetlands](#) 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.S. Army Corps of Engineers District](#).

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view 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 tubercid 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.