

Voluntary Stream Setback Compliance Rutherford Ranch Winery 1680 Silverado Trail St Helena, CA



**Prepared
For**

Rutherford Ranch Winery
by
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Voluntary Stream Setback Compliance Rutherford Ranch Winery 1680 Silverado Trail

EXECUTIVE SUMMARY

This study was conducted at the request of Rutherford Ranch Winery as background information for an application with Napa County Planning, Building, and Environmental Services Department for a Stream Setback exemption.

The property is located at 1680 Silverado Trail, APN 030-300-030-000 within the Rutherford USGS Quadrangle. Rutherford Ranch Winery proposes to voluntarily remedy Stream Setback encroachments on a section of an unnamed creek adjacent to a permitted winery.

Rutherford Ranch Winery proposes to voluntarily remove existing Storage Containers, relocate existing Water Tanks, remove portions of the non-permitted infrastructure within the stream setback and remove all equipment storage within the Stream Setback Zone. Implementation of a revegetation plan for these areas will be initiated following removal.

It is proposed that the following essential structures that are not in compliance be permitted with a stream setback exemption (See Attached Area Plan). Justification for consideration of an exemption is based on the finding that removal will create a greater disturbance to the creek, and potential to increase sediment than leaving them in place.

The findings presented below are the result of field studies conducted on February 28, 2019 by Kjeldsen Biological Consulting:

- The USGS Rutherford Quadrangle s that the unnamed blue-line creek has been historically realigned, presumably for agricultural purposes. This unnamed blue-line creek is a tributary of Conn Creek;
- Requirements for Stream Setbacks have changed since the original Use Permit was approved for the existing Winery. Permitted structures, landscape plantings and hardscape of the Rutherford Ranch Winery are present within the 45-foot setback zone;
- In review of the existing Winery Use Permit it was discovered that additional structures associated with the operation of the permitted winery have been installed within the 45-foot Stream Setback Zone;
- The applicant proposes to voluntarily remove of all non-essential structures (stored supplies, equipment, water storage tanks, and storage containers) within the 45-foot stream setback;
- The unpermitted structures within the setback have not resulted in a net increase in soil loss or runoff;
- The unpermitted structures within the setback did not impact any Federal or State protected wetlands as defined by Section 404 of the Clean Water Act. All structures that are proposed to be retained within the setback are located above the highwater mark;

- No special-status plants or habitat for was identified or would be expected within the footprint of the 45-foot Stream Setback Zone;
- No habitat for listed animals or critical habitat was identified within the footprint of the proposed study area. It is unlikely that there was any impact to any listed special-status plant or animal species known for the Quadrangle or the region based on the associated habitat present;
- Encroachment into the setback did not significantly reduce the habitat for any State or Federally listed species;
- The proposed removal and permitting of non-complying features will not substantially interfere with native wildlife species, wildlife corridors, and or native wildlife nursery sites;
- The project will not impact any Sensitive Natural Communities regulated by the California Department of Fish and Wildlife; and
- No State or Federal biological permits will be required by the proposed project provided no removal of riparian vegetation and no substantial change or impact to the bed and or bank of the unnamed blueline creek.

The footprint of the non- permitted structures within the setback is minimal. With the removal of some of the structures and reestablishment of riparian vegetation there will be a less than significant impact to the creek.

Recommendations

We recommend all non-essential structures and stored equipment within the 45-foot setback adjacent to existing permitted structures be removed.

We recommend leaving the essential structures within the setback zone in place and permitting them based on the potential risk of additional impacts during removal. Removal of these structures presents a greater risk of disturbance to the creek than leaving these features in place.

We recommend that the final design plan incorporate revegetation and plantings appropriate to mitigate any potential adverse environmental effects of structures to remain within the 45-foot setback.

We recommend that removal of non-essential structures should be conducted when the creek is dry using Best Management Practices, and no removal of riparian vegetation and no work or equipment within the bed and or bank of the unnamed blueline creek.

Voluntary Stream Setback Compliance Rutherford Ranch Winery 1680 Silverado Trail

A. PROJECT DESCRIPTION

This study was conducted at the request of Rutherford Ranch Winery as background information for a voluntary compliance application with Napa County Planning, Building, and Environmental Services Department for a Stream Setback exemption. The property is located at 1680 Silverado Trail, APN 030-300-030-000 within the Rutherford USGS Quadrangle.

A.1 Introduction

Rutherford Ranch Winery proposes to voluntarily remove existing Storage Containers, relocate existing Water Tanks, remove portions of the non-permitted infrastructure within the stream setback and remove all equipment storage within the Stream Setback Zone. Implementation of a revegetation plan for these areas will be initiated following removal.

It is proposed that the essential structures that are not in compliance be permitted with a stream setback exemption (See Attached Area Plan). Justification for consideration of an exemption is based on the finding that removal of structures will create a greater disturbance to the creek than leaving them in place.

A.2 Background

In review of the existing Winery Use Permit it was discovered that additional structures associated with the operation of the permitted winery have been installed within the 45-foot Stream Setback Zone. The applicant proposes to voluntarily come into compliance with changing conditions by removing all non-essential structures within the 45-foot stream setback.

Napa County Setback Requirements “In addition to any requirements of the floodway and floodplain regulations set forth in Title 16, construction of main or accessory structures, earthmoving activity, grading or removal of vegetation or agricultural uses of land (including access roads, avenues and tractor turnaround areas, or other improvements necessary for ongoing agricultural operations) as defined by Section 18.08.040 shall be prohibited within the stream setback areas established below unless specifically permitted in subsection (E) of this section, exempt pursuant to Section 18.108.050.”

A.3 Purpose

The purpose of this report is to identify biological resources that may have been affected by the encroachment and provide an evaluation of unpermitted features installed in the Stream Setback that the applicant proposes to be retained and removed. Evaluation will include:

- To determine the presence of potential habitat for special-status species that may have been impacted by the proposed project, including habitat types which may have the potential for supporting special-status species on the project site (target species that are known for the region, habitat, the Quadrangle and surrounding Quadrangles);
- To identify and assess potential impacts to Federal or State protected wetlands as defined by Section 404 of the Clean Water Act;
- To determine if the project had any substantially interfere with native wildlife species, wildlife corridors, and or native wildlife nursery sites;
- Identify any State or Federal biological permits required by the Stream Setback Encroachment;
- Provide justification for permitting of features that are not in compliance with the present Stream Setback requirement; and
- Recommend measures to reduce biological impacts to a less than significant level pursuant to the California Environmental Quality Act (CEQA).

B. SURVEY METHODOLOGY

Field work was conducted on February 28, 2019, and is based on conditions present at that time. The study area is an unnamed creek adjacent to the Rutherford Ranch Winery.

B.1 Project Scoping

The scoping for the project considered location and type of habitat and or vegetation types present on the study area or associated with potential special-status plant species known for the Quadrangles, surrounding Quadrangles, the County, or the region. Our scoping also considered records in the most recent version of the Department of Fish and Wildlife California Natural Diversity Data Base (CDFW CNDDDB Rare Find-3) and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants. “Target” special-status species are those listed by the State, the Federal Government, or the California Native Plant Society or considered threatened in the region. Our scoping is also a function of our familiarity with the local flora and fauna as well as previous projects on other properties in the area.

Section 15380 of the California Environmental Quality Act [CEQA (September, 1983) has a discussion regarding non-listed (State) taxa. This section states that a plant (or animal) must be treated as Rare or Endangered even if it is not officially listed as such. If a person (or organization) provides information showing that a taxon meets the State’s definitions and criteria, then the taxa should be treated as such.

Tables I and I present CDFW CNDDDB Rare Find species and U.S. Fish and Wildlife Service listed species for the Quadrangle and surrounding Quadrangles.

B.2 Field Survey Methodology

Our studies were made by walking transects through and around the project site. Our fieldwork focused on locating suitable habitat for organisms or indications that such habitat exists on the study area. Digital photographs were taken during our studies to document conditions and selected photographs are included within this report.

Plants Field surveys were conducted identifying and recording all species on the site and in the near proximity. Transects through the proposed project sites were made methodically by foot. Transects were established to cover topographic and vegetation variations within the study area. The Intuitive Controlled approach calls for the qualified surveyor to conduct a survey of the area by walking through it and around its perimeters, and closely examining portions where target species are especially likely to occur. The open nature of the site, historic, and ongoing agricultural practices, and the relatively small size of the proposed development footprint facilitated our field studies. All plant life was recorded in field notes and is presented in Appendix A

The fieldwork for identifying special-status plant species is based on our knowledge and many years of experience in conducting special-status plant species surveys in the region. Plants were identified in the field or reference material was collected when necessary, for verification using laboratory

examination with a binocular microscope and reference materials.

Typically, blooming examples are required for identification, however it is not the only method for identifying the presence of or excluding the possibility of rare plants. Vegetative morphology and dried flower or fruit morphology, which may persist long after the blooming period, may also be used. Skeletal remains from previous season's growth can also be used for identification. Some species do not flower each year or only flower at maturity and therefore must be identified from vegetative characteristics. Algae, fungi, mosses, lichens, ferns, Lycopphyta, and Sphenophyta have no flowers and there are representatives from these groups that are now considered to be special-status species, which require non-blooming identification. For some plants unique features such as the aromatic oils present are key indicators. For some trees and shrubs with unique vegetative characteristics flowering is not needed for proper identification. The vegetative evaluation as a function of field experience can be used to identify species outside of the blooming period to verify or exclude the possibility of special-status plants in a study area.

Habitat is also a key characteristic for consideration of special-status species in a study area. Many special-status species are rare in nature because of their specific and often very narrow habitat, or environmental requirements. Their presence is limited by specific environmental conditions such as: hydrology, microclimate, soils, nutrients, interspecific, intraspecific competition, and aspect or exposure. In some situations, special-status species particularly annuals may not be present each year and in this case one has to rely on skeletal material from previous years. A site evaluation based on habitat or environmental conditions is therefore a reliable method for including or excluding the possibility of special-status species in an area.

Animals were identified in the field by their sight, sign, or call. Our field techniques consisted of surveying the area with binoculars and walking the perimeter of the project site. Existing site conditions were used to identify habitat, which could potentially support special-status animal species. All animal life was recorded in field notes and is presented in Appendix A.

Trees were surveyed to determine whether occupied raptor nests were present within the proximity of the project site (i.e., within a minimum 500 feet of the areas to be disturbed). Surveys consisted of scanning the trees on the property (500 ft +) with binoculars searching for nest or bird activity. Our search was conducted from the property and by walking under existing trees looking for droppings or nest scatter from nests that may be present that were not observable by binoculars.

Aerial photos were reviewed to look at the habitat surrounding the site and the potential for wildlife movement, or wildlife corridors from adjoining properties onto or through the site.

Wetlands The project site was reviewed to determine from existing environmental conditions with a combination of vegetation, soils, and hydrologic information if seasonal wetlands were present. Wetlands were evaluated using the ACOE's three-parameter approach: Vegetation, Hydrology, and Soils.

Tributaries to Waters of the US are determined by the evaluation of continuity and "ordinary high-water mark." The ordinary high-water mark is determined based on the top of scour marks and high flow impacts on vegetation.

Stream 1. A watercourse designated by a solid line or dash and three dots symbol on the largest scale of the United State Geological Survey maps most recently published, or any replacement to that symbol; 2. Any watercourse which has a well-defined channel with a depth greater than four feet and banks steeper than 3:1 and contains hydrophilic vegetation, riparian vegetation or woody-vegetation, including tree species greater than ten feet in height.

Structure means anything which is built or constructed, or any piece of work artificially built up or composed of parts joined in some definite manner whether installed on, above, or below the surface of the land.

C. RESULTS / FINDINGS

C.1 Biological Setting

The study site is located in Napa County within the watershed of Conn Creek on the east side of the Silverado Trail (see Plate I for Location).

The USGS Rutherford Quadrangle shows that historically the unnamed drainage has been realigned. The Quadrangle Map shows the USGS Blue Line Creek extending through what is now a vineyard. There are permitted structures on both sides of the drainage within the 45-foot setback. Oaks and willows are present on both sides of the creek. It is unknown if vegetation was removed when additional structures were placed within the 45-foot Creek Setback area.

The property is within the inner North Coast Range Mountains. The property and surrounding region are strongly influenced by storms and fog from the Pacific Ocean. The region is in climate Zone 14 "Ocean influenced Northern and Central California" characterized as an inland area with ocean or cold air influence. The climate of the region is characterized by hot, dry summers and cool, wet winters, with precipitation that varies regionally from less than 30 to more than 60 inches per year. This climate regime is referred to as a "Mediterranean Climate." The average annual temperature ranges from 45 to 90 degrees Fahrenheit. The variations of abiotic conditions including geology results in a high level of biological diversity per unit area in the region.

The aerial photo illustrates the site (Plate III) and the photographs that follow further document existing conditions of the project site.

C.2 Habitat Types Present

The vegetation of California has been considered to be a mosaic with major changes present from one area to another often with distinct vegetation changes within short distances. It is generally convenient to refer to the vegetation associates on a site as a plant community or alliance. Typically, plant communities or vegetation alliances are identified or characterized by the dominant vegetation form or plant species present. There have been numerous community classification schemes proposed by different authors using different systems for the classification of vegetation. A basic premise for the designation of plant communities, associations or alliances is that in nature there are distinct plant populations occupying a site that are stable at any one time (climax community is a biotic association, that in the absence of disturbance maintains a stable assemblage over long periods of time).

In general terminology, one would refer to the habitat within the Stream Setback as Ruderal, Oak Woodland, and Riparian Woodland. The photographs below illustrate the study area and the present conditions.

The dominant land cover types in the vicinity of the property consist of chaparral, oak woodlands, grasslands, riparian corridor and vineyards.



Figure 1. The study area along an ephemeral unnamed tributary of Conn Creek.



Figure 2. Unpermitted pad adjacent to permitted structures, that is proposed to remain within the Stream Setback Zone.



Figure 3. Permitted Pump House on west side of the unnamed creek.



Figure 4. Permitted Water Tanks (left) within 45-foot setback. Storage Container will be removed, and proposed location of relocated Water Tanks



Figure 5. Unpermitted Water Storage Tanks proposed to be removed.



Figure 6. Upstream channel above the study area and adjacent to the Rutherford Ranch Vineyard.

C.3 Special-Status Species

Special-status organisms are plants or animals that have been designated by Federal or State agencies as rare, endangered, or threatened. Section 15380 of the California Environmental Quality Act [CEQA (September, 1983)] has a discussion regarding non-listed (State) taxa. This section states that a plant (or animal) must be treated as Rare or Endangered even if it is not officially listed as such. If a person (or organization) provides information showing that a taxon meets the State's definitions and criteria, then the taxa should be treated as such.

A map from the CDFW CNDDDB Rare Find shows known special-status species in the proximity of the project as shown on Plate II. These taxa as well as those listed in Appendix C Special-status Species known for the Quadrangle and Surrounding Quadrangles were considered and reviewed as part of our scoping for the project site and property.

Special-status Plants

Table I below provides a list of plant species that are known to occur within the region of the proposed project (CDFW CNDDDB and U.S. Fish and Wildlife Service). The table includes an analysis of habitat for presence or absence.

Table I Analysis of CDFW CNDDDB, CNPS and USFWS special-status plant species from the region. Columns are arranged alphabetically by scientific name.

Scientific Name Common Name	Species Habitat Association or Plant Community	Habitat present on Project Site	Bloom Time	Obs. on or Near Site	Analysis of habitat on project site for presence or absence.
<i>Amorpha californica</i> var. <i>napensis</i> Napa False Indigo	Cismontane Woodland	No	April- July	No	Absence of habitat.
<i>Astragalus claranus</i> Clara Hunt's Milk- vetch	Chaparral, Cismontane Woodland, Valley and Foothill Grassland	No	March- May	No	Absence of requisite micro-habitat and vegetation associates.
<i>Brodiaea leptandra</i> Narrow-anthered California Brodiaea	Cismontane Woodland	No	May- June	No	Requisite habitat, exposure and historic land use preclude presence on project site.
<i>Ceanothus confusus</i> Rincon Ridge Ceanothus	Closed Cone Conifer Forests, Chaparral	No	Feb.- April	No	Absence of typical habitat and vegetation associates.
<i>Ceanothus divergens</i> Calistoga Ceanothus	Chaparral, Serpentine or Volcanic-Rocky	No	May- Sept.	No	Absence of typical habitat and vegetation associates.

Scientific Name Common Name	Species Habitat Association or Plant Community	Habitat present on Project Site	Bloom Time	Obs. on or Near Site	Analysis of habitat on project site for presence or absence.
<i>Ceanothus purpureus</i> Holly-leaved Ceanothus	Chaparral	No	March- May	No	Absence of typical habitat and vegetation associates. Lack of finding during our fieldwork.
<i>Ceanothus sonomensis</i> Sonoma Ceanothus	Chaparral, Serpentinite or Rocky Volcanic.	No	Feb.- March	No	Absence of typical habitat and vegetation associates.
<i>Clarkia breweri</i> Brewer's Clarkia	Openings in Chaparral or Woodlands	No	April- June	No	Absence of requisite habitat and vegetation associates on the site.
<i>Erigeron greenii</i> Green's Narrow- leaved Daisy	Chaparral, (Serpentinite)	No	May- Sept.	No	Absence of edaphic conditions required for presence.
<i>Hesperolinon scharsmithiae</i> Sharsmith's Western Flax	Chaparral, Serpentinite	No	May- July	No	Requisite edaphic habitat absent on the site or in the immediate vicinity.
<i>Layia septentrionalis</i> Colusa Layia	Cismontane Woodland, Valley and Foothill Grassland, Serpentinite	No	April- May	No	Requisite edaphic habitat absent on the site or in the immediate vicinity.
<i>Leptosiphon acicularis</i> Bristly Leptosiphon	Grassy Areas, Woodlands, Chaparral	No	April- July	No	Historic land use precludes presence.
<i>Leptosiphon jepsonii</i> Jepson's Leptosiphon	Chaparral, Cismontane Woodland, Valley and Foothill Grassland	No	April- May	No	Historic land use precludes presence. Lack of finding during our fieldwork.
<i>Penstemon newberryi</i> var. <i>sonomensis</i> Sonoma Beardtongue	Cismontane Woodland	No	April- Aug.	No	Historic land use precludes presence.
<i>Streptanthus hisperidis</i> Green Jewel-flower	Rocky Chaparral, Grassland	No	April- July	No	Lack of edaphic habitat and historic use of project site precludes presence.

The CDFW CNDDDB does not show any records of special-status species of plants for the study site. The proposed project site does not contain habitat which would support special-status plant species. The historic use, absence of serpentine or serpentinite soils, lack of vernal pools, or wetlands, and vegetation associates reasonably precludes the presence of special-status species within the project site.

Special-status Animals

Table II below provides a list of animal species that are known to occur within the region of the proposed project (CDFW CNDDDB and U.S. Fish and Wildlife Service). The table includes an analysis / justification for concluding absence.

Table II. Analysis of CDFW CNDDDB and USFWS target special-status animal species from the region. Columns are arranged alphabetically by scientific name.

Scientific Name Common Name	Habitat	Potential for project site.	Obs. on Project Site	Analysis of habitat on project site for presence or absence.
<i>Antrozous pallidus</i> Pallid Bat	Roosts in buildings and overhangs, woodlands	No	No	No evidence for presence observed.
<i>Aquila chrysaetos</i> Golden Eagle	Nests near water	No	No	Lack of habitat.
<i>Ardea alba</i> Great Egret	Feeds in open areas. Nests in colonies	No May fly over	No	Lack of suitable habitat for nesting.
<i>Ardea herodias</i> Great Blue Heron	Feeds in open areas. Nests in colonies	No	No	Lack of suitable habitat for nesting.
<i>Branchinecta conservatio</i> Conservancy Fairy Shrimp	Vernal Pools	No	No	Lack of habitat.
<i>Buteo swainsoni</i> Swainson's Hawk	Open areas with riparian influence	May fly over	No	Lack of nesting habitat.
<i>Corynorhinus townsendii</i> Townsend's Big-eared Bat	Caves, and buildings. Trees min 24"DBH with basal hollow of 2 sq ft.	May fly over	No	No roosting habitat on site.
<i>Elanus leucurus</i> White-tailed Kite	Nests in tall trees near water	May fly over	No	Unlikely due to existing disturbance.
<i>Emys marmorata</i> Western Pond Turtle	Slow moving water or ponds	No	No	Unlikely within drainage.

Scientific Name Common Name	Habitat	Potential for project site.	Obs. on Project Site	Analysis of habitat on project site for presence or absence.
<i>Erethizon dorsatum</i> North American Porcupine	Cismontane conifer woodlands	No	No	Lack of suitable habitat.
<i>Haliaeetus leucocephalus</i> Bald Eagle	Nests near open water	No	No	Lack of habitat.
<i>Lasiurus blossevillii</i> Western Red Bat	Deciduous Forests	No	No	Lack of habitat, historic use of the site.
<i>Myotis yumanensis</i> Yuma Myotis	Roosts in old buildings or caves	No	No	Lack of habitat.
<i>Nycticorax nycticorax</i> Black-crowned Night Heron	Nests in reeds or trees near water	No	No	Lack of habitat.
<i>Oncorhynchus mykiss irideus</i> Steelhead-central California Coast	Aquatic	No	No	Not recorded for presence within five miles of the property.
<i>Phalacrocorax auritus</i> Double-crested Cormorant	Feeds in open water	No	No	Lack of habitat.
<i>Progne subis</i> Purple Martin	Open areas near water	No	No	Lack of habitat.
<i>Rana boylei</i> Foothill Yellow-legged Frog	Streams with pools	Low	No	Known in Conn Creek. Unlikely as drainage dries in summer.
<i>Strix occidentalis caurina</i> Northern Spotted Owl	Old growth, forested deep canyons.	No	No	Requisite habitat absent. Not associated with project.
<i>Taricha rivularis</i> Red-bellied Newt	Aquatic	Low	No	Unlikely as drainage dries in summer.
<i>Syncaris pacifica</i> California Freshwater Shrimp	Creeks and Estuaries below 300 ft.	No	No	Requisite habitat required for presence lacking.
<i>Taxidea taxus</i> American Badger	Grasslands with food source of ground squirrels	No	No	Absence of food sources required for presence. No burrows observed.

Based on habitat associated with the proposed project site it is unlikely that any of the species shown in the table above, or others known for the region, would occur on the sites given the history of

disturbance and lack of proper hydrology/topography. It is unlikely that the project would negatively impact special-status animals or have any significant habitat loss for special-status animal species.

C.4 Discussion of Sensitive Habitat Types

The Napa County Baseline Data Report defines Biotic communities as the characteristic assemblages of plants and animals that are found in a given range of soil, climate, and topographic conditions across a region. Riparian vegetation is recognized as a sensitive habitat type.

The sensitive habitat types identified by the CDFW CNDDDB for the quadrangle and surrounding quadrangles are the following; Coastal and Valley Freshwater Marsh, Northern Hardpan Vernal Pool Northern Vernal Pool and Valley Needle Grass Grassland. The above referenced habitat types are not present on the project sites.

C.5 Proposed Voluntary Removal within Stream Setback Zone

The applicant proposes the voluntary removal of all non-essential structures that were constructed over time within the 45-foot Stream Setback Zone. The voluntary removal of all stored supplies and equipment will be initiated as well as removal of the majority of non-permitted structures (See Area Plan). BMPs must be employed during the removal phase in the setback zone. No work may occur within the bed and bank of the creek.

The proposed removal of non-permitted structures within the Stream Setback Zone for compliance will not impact any Federal or State protected wetlands as defined by Section 404 of the Clean Water Act.

Following removal of non-essential structures within the Stream Setback the area will be revegetated with appropriate native trees and shrubs.

C.6 Proposed Permitting of Essential Structures Within the Stream Setback Zone

There are permitted structures within the 45-foot Setback Zone from an approved Winery permit issued prior to the establishment of the 45-foot Stream Setback Requirements.

The non-permitted essential structures within the Stream Setback Zone include the following: Concrete Retaining Wall and Pad, Reclaimed Water Tank, and Reclaimed Water Pump House to the south of the creek; Irrigation Pump House, Water Storage Tanks, and a section of pavement to the north of the creek. (See Area Plan)

Rutherford Ranch Winery requests a stream setback exemption for the above referenced structures. The structures that are proposed to be retained within the setback are located above the highwater mark of the creek.

It is our finding that removal of these essential structures, from a biological perspective, may potentially result in significant biological impacts by increasing sediment to the creek as well as potential off-site impacts. Removal would require grading and potential soil erosion.

The essential unpermitted structures with the 45-foot Stream Setback have been in place for years and are not a threat to the function and integrity of the creek in this area. Unpermitted structures within the setback have not resulted in a net increase in soil loss or runoff. Unpermitted structures are directly adjacent to permitted structures within the 45-foot Stream Setback and removal would not result in a net benefit or increase of use by wildlife.

D. POTENTIAL BIOLOGICAL IMPACTS

The project's effect on onsite or regional biological resources is considered to be significant if the project results in:

- Alteration of unique characteristics of the area, such as sensitive plant communities and habitats (i.e. serpentine habitat, wetlands, riparian habitat);
- Adverse impacts to special-status plant and animal species;
- Adverse impacts to important or vulnerable resources as determined by scientific opinion or resource agency concerns (i.e. sensitive biotic communities, special status habitats; e.g. wetlands);
- Loss of critical breeding, feeding or roosting habitat; and
- Interference with migratory routes or habitat connectivity.

In the sections below a discussion of potential impacts of the project on the biological resources is presented.

Napa County Conservation Regulations 18.108.040 Exceptions in the form of a use permit. Upon application by the landowner or leaseholder of a site, an exception in the form of a use permit may be granted to any of the requirements of this chapter other than Section 18.108.060 if, after a public hearing, findings can be made that:

A. For structural/road development projects, all of the following are true (Biological):

- *Roads, driveways, buildings and other man-made structures have been designed to complement the natural landform and to avoid excessive grading;*
- *The development project minimizes removal of existing vegetation, incorporates existing vegetation into the final design plan, and replacement vegetation of appropriate size, quality and quantity is included to mitigate adverse environmental effects;*
- *Disturbance to streams and watercourses shall be minimized, and the encroachment if any, is the minimum necessary to implement the project;*
- *The project does not adversely impact threatened or endangered plant or animal habitats as designated by state or federal agencies or identified as special-status species, sensitive biotic communities or habitats of limited distribution in the county's Baseline Data Report (2005 or as amended) or Environmental Resources Mapping System;*
- *The proposed development does not result in a net increase in soil loss and runoff.*

D.1 Analysis of Potential Impacts to Special-status Species

The CDFW CNDDDB does not show any listed species for the project site. The study area is within the mapped area for the Foothill Yellow-legged Frog and the Western Pond Turtle.

Foothill Yellow-Legged Frog is a California Species of Special Concern. Foothill yellow-legged frogs occur in the Coast Ranges from the Oregon border south to the Transverse Ranges in Los Angeles County, west of the Cascade crest in most of northern California, and in the Sierra Nevada foothills south to Kern County. The species can occur from sea level to 6,000 feet. Although the species still occurs on many streams along the northern California coast, it has become extremely rare in the south. The foothill yellow-legged frog inhabits rocky streams with shallow, flowing water in valley foothill riparian, hardwood-conifer, mixed conifer, coastal scrub, mixed chaparral and wet meadow communities. They are frequently found in moving but not swiftly flowing water with rocky bottoms. Rocks within the streams or within several feet of the water provide cover during periods of inactivity. Breeding usually occurs between late March and early June. Eggs generally hatch in about 15 to 30 days depending on water temperature. Foothill yellow-legged frog tadpoles require three to four months in water for successful development. Threats to this species include exotic predators such as non-native fish and bullfrogs, poor timing of water releases from upstream reservoirs that scour eggs from oviposition substrates, and decreased waterflows that can force adult frogs into permanent pools where they may be more susceptible to predation.

The CNDDDB reports an occurrence within Conn Creek south of the site. The species was not observed during our review of the site. The seasonal hydrology of the unnamed drainage likely limits its suitability for foothill yellow-legged frogs. The un-named creek does not provide breeding habitat due to its seasonality.

Western Pond Turtle is a California Species of Special Concern; its federal listing status is currently under review by the USFWS. Western pond turtles inhabit a broad range of aquatic habitats including ponds, slow-moving streams, and man-made canals and reservoirs. The highest densities are found in suitable aquatic sites that also have available aquatic and shoreline basking areas such as downed logs. Hatchlings (i.e. individuals through their first year of activity) require shallow water habitat with relatively dense submerged or short emergent vegetation in which to forage. Turtles use upland grasslands in the vicinity of aquatic habitats for egg-laying, hibernation, and aestivation.

The nearest documented occurrence is from Conn Creek just south of the site. Suitable aquatic habitat for the species is not present within the unnamed drainage. The riparian woodland and oak woodland habitat in the area provides low potential for this species. No western pond turtles were observed during the reconnaissance assessment.

Many special-status species are rare in nature because of their specific and often very narrow habitat or environmental requirements. Their presence is limited by specific environmental conditions such as: hydrology, microclimate, soils, nutrients, interspecific and intraspecific competition, and aspect or exposure. In some situations, special-status species particularly annuals may not be present each year and in this case one has to rely on skeletal material from previous years.

Our fieldwork did not find any habitat for any special-status animal species known for the Quadrangle, surrounding Quadrangles or for the region that would be impacted by the proposed project. The present conditions of the project sites and historic use are such that there is little reason to expect the occurrence of any special-status animal species on the property or within the footprint of the project.

The property and project site conditions are such that there is no reason to expect any impacts to other special-status species on-site or off-site provided standard best management practices are utilized and the erosion control plan is implemented.

D.2 Analysis of Potential Impacts on Sensitive Habitat

The project footprint is primarily within a historically developed landscape. The removal of the majority of unpermitted structures within the 45-foot Stream Setback and revegetation, should result in a net increase in habitat and benefit as the riparian vegetation matures.

Native Grassland The project will not impact any populations of native grasslands.

Seasonal Wetland generally denotes areas where the soil is seasonally saturated and/or inundated by fresh water for a significant portion of the wet season, and then seasonally dry during the dry season. To be classified as “Wetland,” the duration of saturation and/or inundation must be long enough to cause the soils and vegetation to become altered and adapted to the wetland conditions. Varying degrees of pooling or ponding, and saturation will produce different edaphic and vegetative responses. These soil and vegetative clues, as well as hydrological features, are used to define the wetland type. Seasonal wetlands typically take the form of shallow depressions and swales that may be intermixed with a variety of upland habitat types. Seasonal wetlands fall under the jurisdiction of the U.S. Army Corps of Engineers. No seasonal wetlands are were identified with the proposed vineyard blocks.

“Waters of the State” include drainages which are characterized by the presence of definable bed and bank that meet ACOE, and RWQCB definitions and or jurisdiction. Any direct discharge of storm water into “Waters of the State” will require ACOE, CDFW, and RWQCB permits. The unnamed drainage would be considered a “Waters of the State”. Any disturbance to eh bed and or bank would require permitting by Resource Agencies.

Riparian Vegetation is by all standards considered sensitive. Riparian Vegetation functions to control water temperature, regulate nutrient supply (biofilters), bank stabilization, rate of runoff, wildlife habitat (shelter and food), release of allochthonous material, release of woody debris which functions as habitat and slow nutrient release, and protection for aquatic organisms. Riparian vegetation is also a moderator of water temperature has a cascade effect in that it relates to oxygen availability. The project will not impact or remove any riparian vegetation upon completion revegetation of the site will expand the riparian vegetation along the creek.

Trees No tree removal is proposed.

Wildlife Habitat and Wildlife Corridors are natural areas interspersed with developed areas are important for animal movement, increasing genetic variation in plant and animal populations,

reduction of population fluctuations, and retention of predators of agricultural pests and for movement of wildlife and plant populations. Wildlife corridors have been demonstrated to not only increase the range of vertebrates including avifauna between patches of habitat but also facilitate two key plant-animal interactions: pollination and seed dispersal. Corridor users can be grouped into two types: passage species and corridor dwellers. The data from various studies indicate that corridors should be at least 100 feet wide to provide adequate movement for passage species and corridor dwellers in the landscape. The project site is surrounded by a winery and vineyards. There is limited wildlife habitat and relatively small to be used as a wildlife corridor.

Raptor Nests, Bird Rookeries, Bat Roosts, Wildlife Dens or Burrows

No raptor nests, bird rookeries, bat roosts, wildlife dens or burrows were observed within the project footprint.

Very few burrows were observed, but small mammals and songbirds likely utilize habitats on the project site for foraging and cover. No significant wildlife dens or burrows were observed.

Unique Species that are Endemic, Rare or Atypical for the Area

No unique or unusual populations of plants or animals were present on the project site.

The flora and fauna present are typical for the region. There were no unique species, endemic populations of plants or animals or species that are rare or atypical for the area present on the project site or property.

Habitat Fragmentation can result in a net-loss in overall habitat, an increase in edge habitat, and isolation effects, including genetic isolation. Due to these and other factors, small and isolated patches of habitat generally support lower species diversity than do large undeveloped areas. As a consequence of habitat fragmentation, abundance and diversity of species originally present often decline, and losses are most noticeable in small fragments. Loss of habitat, including habitat fragmentation, is the single most important factor affecting the long-term survival of rare, threatened and endangered species.

Habitat fragmentation is a local and global concern. The project will incrementally reduce a small amount of habitat in the area. The proposed change in land use will result in less than significant changes in avifauna and rodent utilization in the area. The proposed project will not lead to significant impacts to habitat fragmentation in the region, significant species exclusion, or significant change in species composition in the region. The project will not result in habitat fragmentation.

D.3 Potential Off-site Impacts of the Project

There is no expected impact to biological resources by the proposed project as long Best Management Practices (BMP's) and no removal of riparian vegetation and no impact to the bed and or bank of the unnamed blue-line creek occurs.

D.4 Potential Cumulative Impacts

Cumulative biological effects are the result of incremental losses of biological resources within a region. The site location, historic development and use of the area within the footprint of the project negate the potential for cumulative biological resource effects. The project development is proposed for an area of the property that has had a long historic use. There is nothing to indicate that there will be any cumulative biological impacts of the project.

D.5 State and Federal Permit

Any impact to the unnamed blue line creek on the property will require agency consultation and permits from the California Department of Fish and Wildlife, U.S. Army Corps of Engineers, and Regional Water Quality Control Board.

E. RECOMMENDATIONS TO AVOID IMPACTS

E.1 Recommendations

Rutherford Family Winery requests permits for several unpermitted structures that are not in compliance with the Stream Setback Zone (See Area Plan).

We recommend all non-essential structures and stored equipment within the 45-foot setback adjacent to existing permitted structures be removed.

We recommend leaving the essential structures within the setback zone in place and permitting them based on the potential risk of additional impacts during removal. Removal of these structures presents a greater risk of disturbance to the creek than leaving these features in place.

We recommend that the final design plan incorporate revegetation and plantings appropriate to mitigate any potential adverse environmental effects of structures to remain within the 45-foot setback.

We recommend that removal of non-essential structures should be conducted when the creek is dry using Best Management Practices, and no removal of riparian vegetation and no work or equipment within the bed and or bank of the unnamed blue-line creek.

F. SUMMARY

We find that the proposed project following recommendations included in this report will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

We find that the project as proposed will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.

We find that the project as proposed will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

We find that the proposed project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

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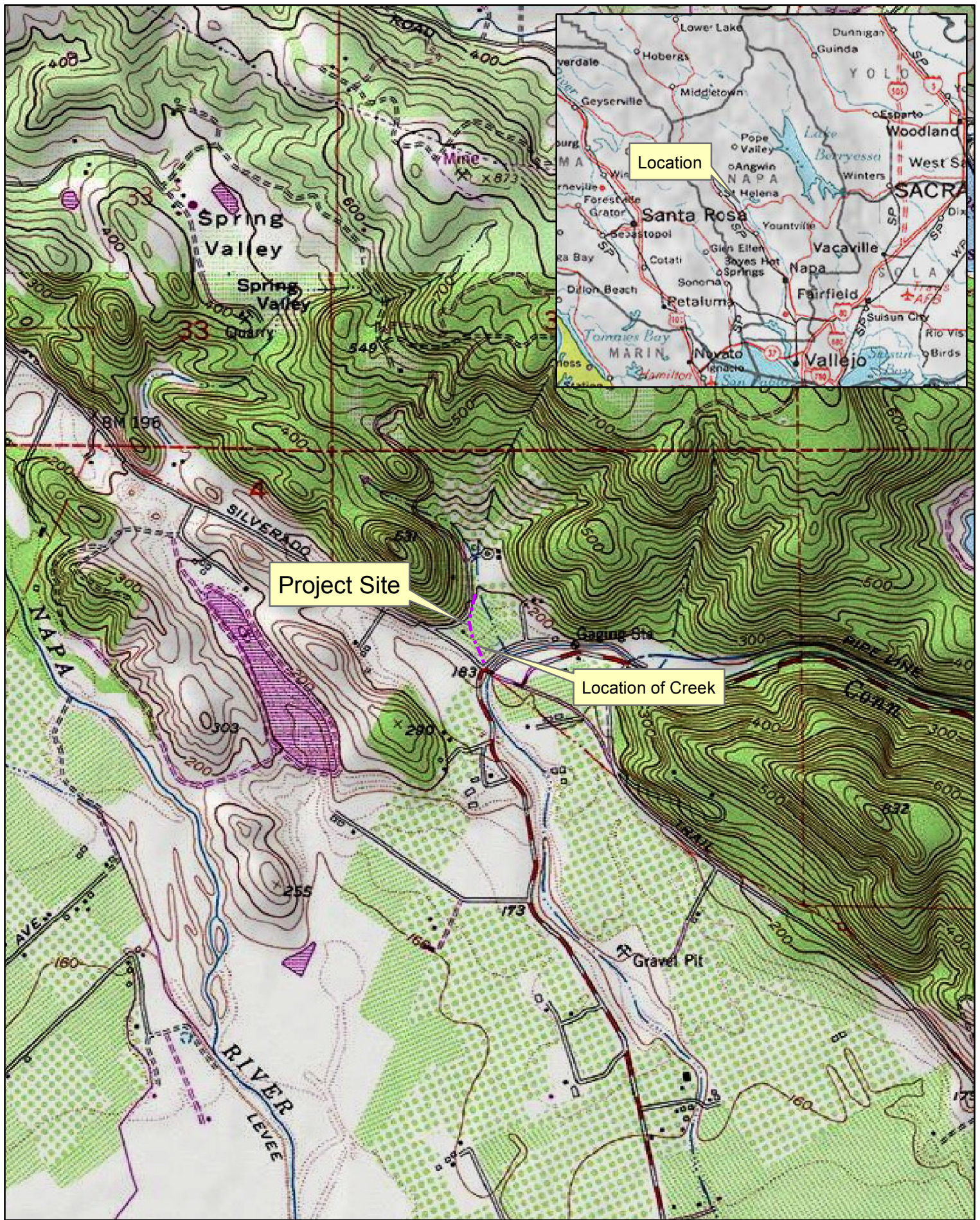


Plate I. Location and Site Map

(USGS Rutherford Quadrangle)



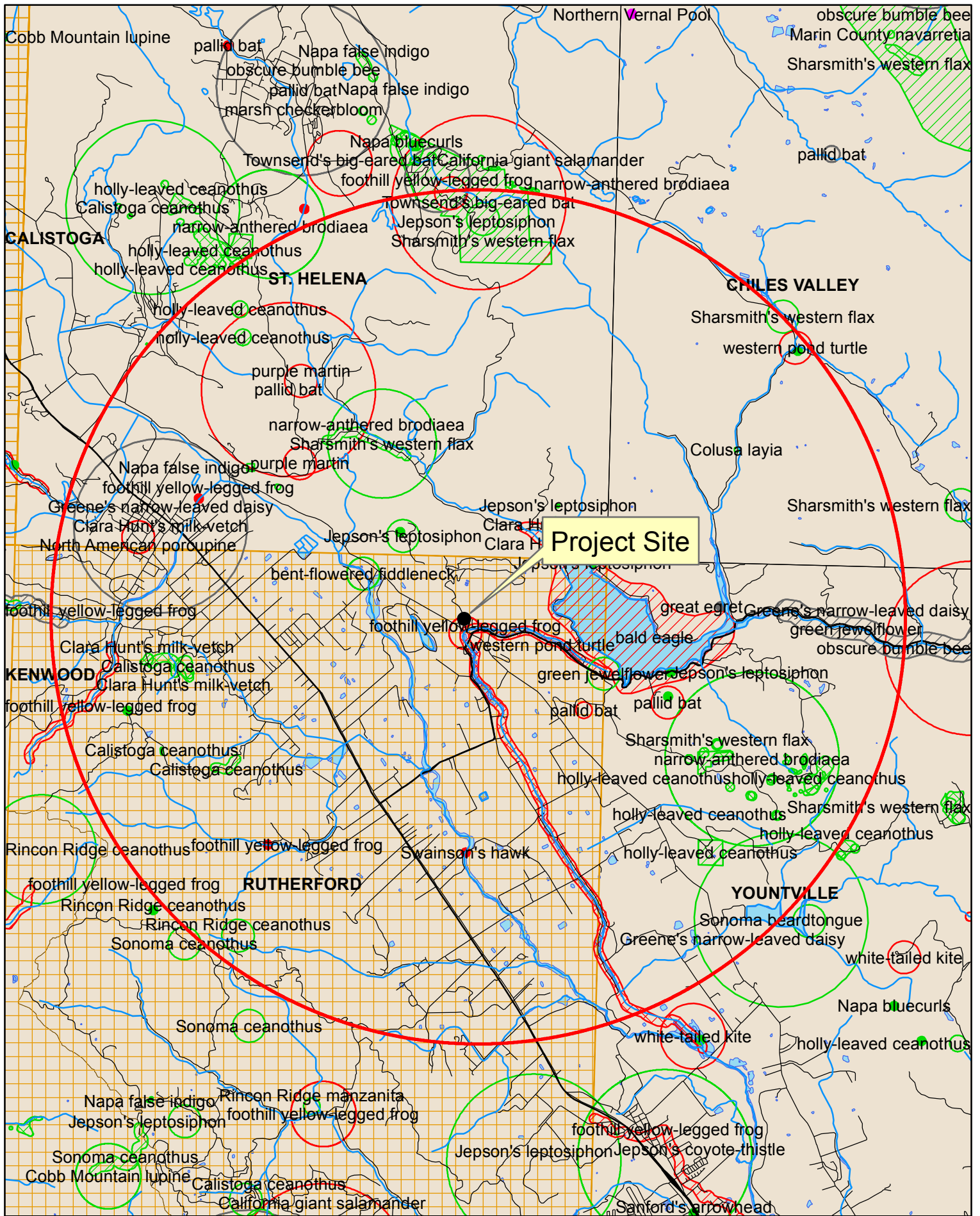
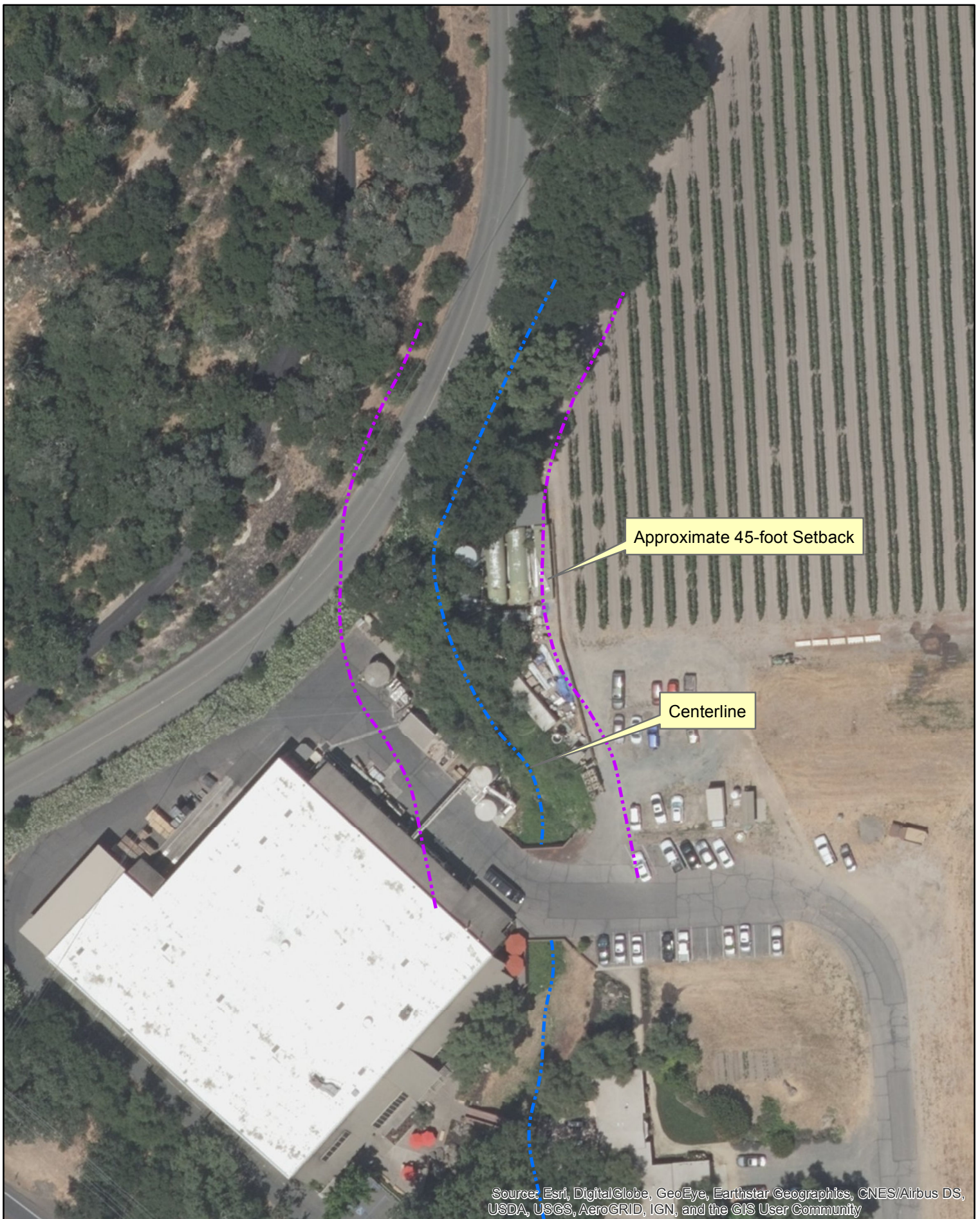


Plate II. CDFW CNDDDB Rare Find Data (Five Mile)

(Data Date March 2019)

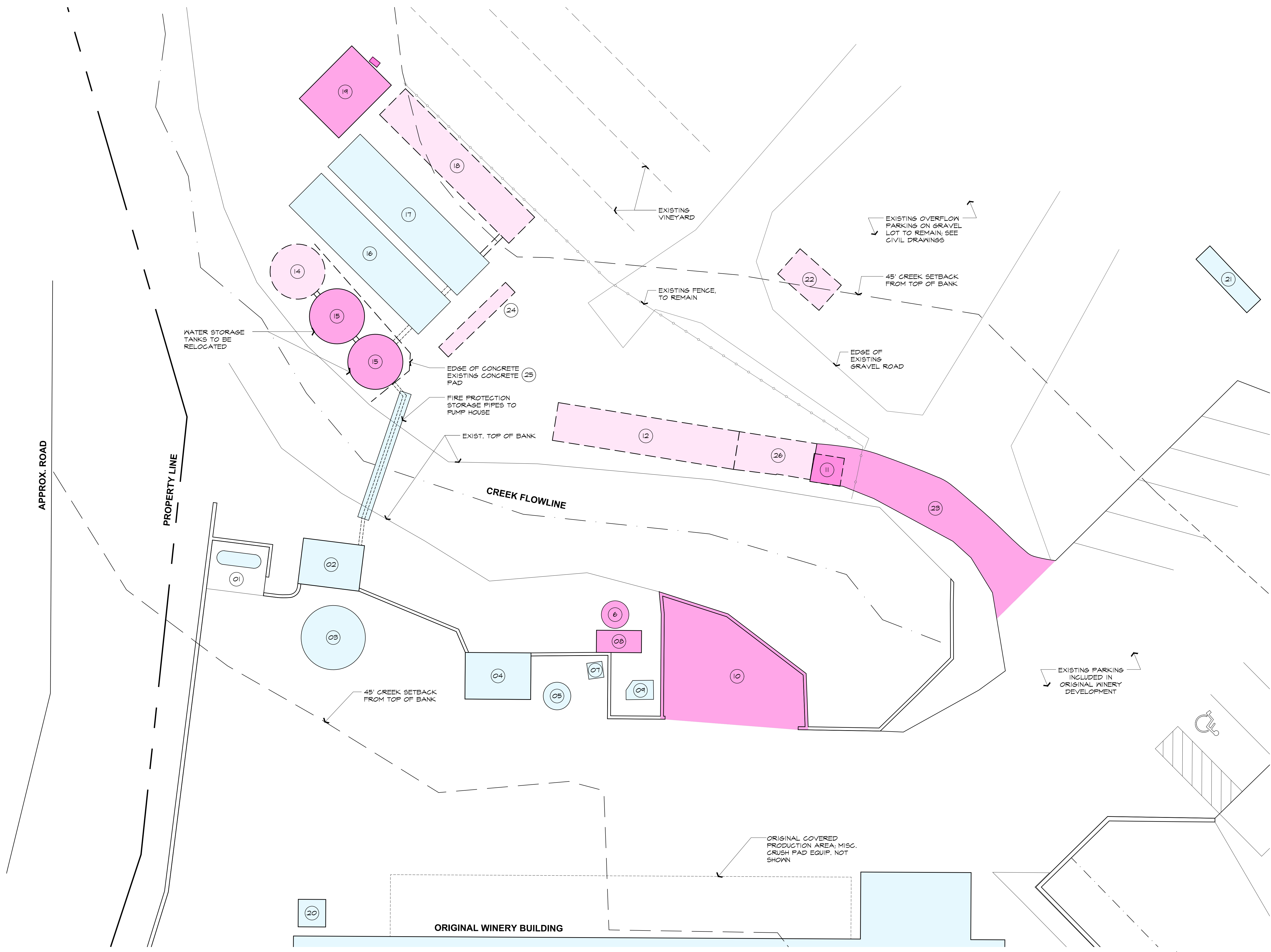




Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Plate III. Aerial Photo / Survey Area

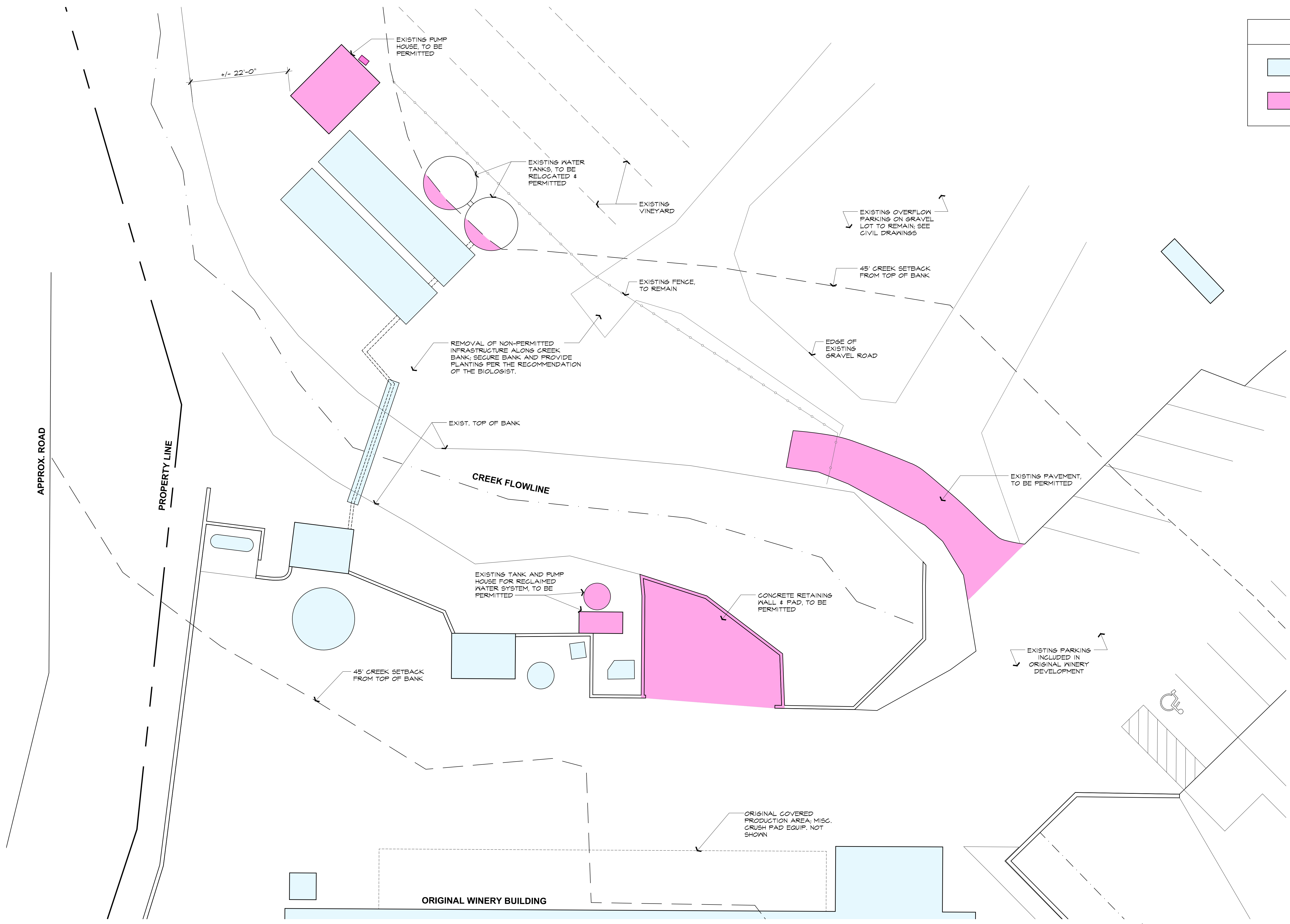




AREA PLAN LEGEND	
	ORIGINAL WINERY DEVELOPMENT AND CONSTRUCTION (PERMITTED)
	UNPERMITTED DEVELOPMENT TO BE RELOCATED OR PERMITTED
	UNPERMITTED DEVELOPMENT TO BE REMOVED

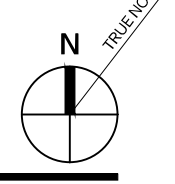
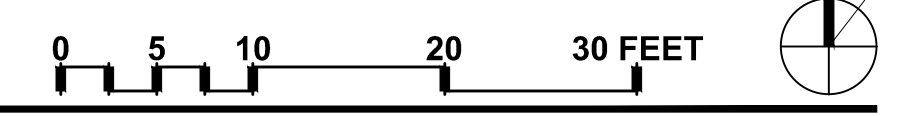
AREA PLAN KEY NOES	
01	PROPANE TANK, ORIGINAL
02	FIRE PROTECTION PUMP HOUSE, ORIGINAL
03	WINERY POTABLE WATER STORAGE, ORIGINAL
04	BOOSTER PUMP HOUSE, ORIGINAL
05	UNDERGROUND PROCESSED WATER TANK, ORIGINAL
06	ABOVE RECLAIMED WATER TANK FOR IRRIGATION, NOT PERMITTED
07	SEPARATOR FOR RECLAIMED WATER SYSTEM, PERMITTED
08	PUMP HOUSE FOR RECLAIMED WATER SYSTEM, NOT PERMITTED
09	TRANSFORMER, ORIGINAL
10	CONCRETE PAD AND RETAINING WALL
11	TOOL SHED, NOT PERMITTED
12	INSULATED 40' CONTAINER, TEMPORARY
13	---
14	IRRIGATION WATER STORAGE TANKS, ADDED WITHOUT PERMIT IN 2000, CONNECTED TO FIRE PROTECTION PER FIRE MARSHALL IN 2010, OFFLINE IN 2012 (DAMAGED)
15	IRRIGATION WATER STORAGE TANKS, ADDED WITHOUT PERMIT IN 2000, CONNECTED TO FIRE PROTECTION PER FIRE MARSHALL IN 2010
16	FIRE PROTECTION WATER STORAGE TANK, ORIGINAL
17	FIRE PROTECTION WATER STORAGE TANK, ORIGINAL
18	40' CONTAINER, TEMPORARY
19	IRRIGATION PUMP HOUSE TO OLIVE GROVE, NOT PERMITTED
20	GENERATOR SHED, PERMITTED
21	PUMP HOUSE, ORIGINAL
22	GREEN HOUSE, NOT PERMITTED
23	SECTION OF PAVING NOT SHOWN IN ORIGINAL CIVIL PERMIT DRAWINGS; DATE OF CONSTRUCTION AND PERMIT HISTORY UNKNOWN.
24	PERGOLA
25	CONCRETE PADS AT WATER TANKS (#14 & #15), NOT PERMITTED.
26	CONCRETE SURFACE, NOT PERMITTED

AREA PLAN LEGEND	
	ORIGINAL WINERY DEVELOPMENT AND CONSTRUCTION (PERMITTED)
	DEVELOPMENT TO BE PERMITTED IN PLACE



APPROX. ROAD
PROPERTY LINE

PROPOSED AREA PLAN
SCALE: 1" = 10'-0"



APPENDIX A

Proposed Revegetation Plan

Goal of Revegetation Plan

It is the goal of this Planting Plan: to re-vegetate the area where the unpermitted structures are to be removed within the 45-foot stream setback with native tree and shrub species. The area to be revegetated consists of the east side of the creek. (See Plate I Planting Plan)

Appropriate erosion control measures will be employed, including reseeding exposed soil with Napa County Erosion control mix with added native grass seeds. If erosion subsequently occurs, the area affected will be re-contoured and protected from further erosion until it is re-vegetated.



Photo 1. Revegetation site. Area of encroachment into 45-foot stream setback.



Photo 2. The photograph illustrates tanks to be relocated and revegetated. (Green tanks are permitted)



Photo 2. The photograph illustrates present use and structures to be relocated and area revegetated.

Location of Plantings

The area proposed for re-vegetation is where the unpermitted structures have encroached into the stream setback area. The site is on lands under the ownership of the applicant. The proposed re-vegetation site will have available water for establishment and an onsite manager with experience in maintaining native vegetation.

Replacement Plantings

Our review of the project area found that the following shrubs are common in the immediate surrounding area: *Baccharis pilularis* and *Heteromeles arbutifolia*.

The table below summarizes the proposed replant numbers consistent with their represent density as found in nearby habitats.

Table I. Proposed Native Shrub Species for Site Restoration

Scientific Name	Common Name	Number of Plants
<i>Baccharis pilularis</i>	Coyote Bush	10
<i>Heteromeles arbutifolia</i>	Toyon	10

Total Plants = 20

Spacing: = Average 5 feet on center in a random irregular non linear pattern. The planting area is approximately 207 linear feet.

Table II. Proposed Native Tree Species for Site Restoration

Scientific Name	Common Name	Number of Plants
<i>Quercus agrifolia</i>	Live Oak	10
<i>Quercus lobata</i>	Valley Oak	10

Total Plants = 20

Planting Design and Layout: Because of the site variability, it is highly recommended that the individual plant locations be selected in the field, in consultation with the vineyard manager. The design layout will be flagged in the field prior to planting and reviewed by a qualified biologist/horticulturist.

Planting Stock: It is proposed that planting stock be purchased from local native plant nurseries. Recommended planting stock of one gallon size or equivalent.

Plant Protection: All plants should receive a 3'x3' woven polypropylene weed mat. The mats will be secured to the ground with heavy gauge steel staples or pins. The weed mat will serve as mulch for soil moisture retention and weed suppression purposes. Woven polypropylene is recommended over other weed control fabrics because of its durability and resistance to punctures. Because rodents are active near the project area, all planting stock should also have browse protection.

If tubes are used (such as Tubex®, BluEx®, or similar product) it is recommended that grow tubes which are specifically designed for restoration activities be used. Protective bird netting must be installed atop of the grow tubes, if tubes are used. Collar and screen hardware may be an option if a restoration contractor is used for the plant installation.

All plant protection hardware should be removed at the end of the project monitoring period or when plants are established, typically three years after installation. Failure to remove planting hardware may ultimately lead to plant mortality.

Nutrients: All plants should be given an appropriate amount of fertilizer at the time of planting to promote healthy growth in the first growing season. General purpose, slow release fertilizers, such as Ozmocote® 14-14-14 or Agriform® pellets are commonly used in plant installations. It is important that the fertilizer is applied directly to the root site of the plants (sub- soil surface) to avoid encouraging weed growth.

Timing: Typically the best time of year to install native plants is in the late fall, when the soil has become adequately wet from fall rains. Getting plants in the ground early gives the plants more time to develop roots and site familiarity before breaking dormancy in the spring. Delaying planting into the late winter and spring, can decrease planting success if an irrigation system is not online.

Irrigation: To minimize drought stress and to encourage successful establishment, the plants will be irrigated during the dry season. The first year of establishment is the most critical, and supplemental irrigation may be needed for the first three to five years. A simple above-ground drip irrigation system is recommended (it may be that hand watering can be used since the site is so small). All woody plants should be targeted with drip emitters. The irrigation system should run at regular intervals and the system should be checked on a regular basis to insure that the system is functioning properly and that the plants are getting the proper quantity of water. A typical irrigation regime for a first year of project is a once weekly watering of one to three gallons per plant, lengthening the period between watering to two weeks may be adequate during subsequent years.

Irrigation should be activated in the spring when soil on the site begins to dry out from winter rains, typically in mid to late April. Drought conditions may require an earlier activation date, and heavier spring rains may allow for a later activation date. Irrigation to the site would typically be shut down by mid-October. Early fall rains may allow for an earlier shut down date, and a prolonged fall drought may require that irrigation occur later into the fall.

Maintenance: Weed control can be just as important as irrigation during the first few years of native planting. Weeds directly compete with the plantings for water, light, and nutrients. Heavy weed growth can also provide habitat for rodents, such as mice, voles, and gophers, which can girdle young plants and damage drip irrigation lines.

Hand Weeding: Spring hand weeding of all weeds growing inside the plant protection hardware and weed mat openings will have the most profound positive effect on the young

plantings. It is important to carefully perform hand weeding when weeds have not become too large and the soil is still soft and moist from winter rains. Periodic hand weeding may be necessary throughout the growing season if irrigation is used. It is very important that crews performing hand weeding are familiarized with the different species selected, so that the project plants are not accidentally damaged or removed.

Weed Mowing/Weed-Eating: It may be desired by the property owner and/or property manager to mow weeds in the project area. Weed removal can also be very beneficial to the plantings, as long as great care is taken not to damage the plants, plant protection hardware, weed mats, or the irrigation system. It is very important that personnel performing weed-eating be shown the various elements of the enhancement planting and that steps be taken to prevent any damage to the plants, hardware, or the irrigation system.

Erosion Control Seed Mix

Native grass seed should be spread on all exposed or open ground. Two seed mix are recommended.

Napa County Erosion Control Seed Mix (with added Native Grass).

Species	Percent of Mix	Species	Percent of Mix
<u>(Blue Wildrye)</u>	20	Lana Vetch	12
Blando Brome	20	Rose Clover	15
Zorro Annual Fescue	8	Crimson Clover	15
Sub Clover	10		

Native Erosion Control Mix

- Bromus carinatus*/California Brome
- Hordeum brachyantherum*/Meadow Barley
- Vulpia microstachys*/Three Weeks Fescue
- Trifolium wildenovii*/Tomcat Clover

Mix from Pacific Coast Seed. 45 Total Lbs./acre

Straw: Straw mix must be sterile or native species only. Straw will be derived from wheat, oats or barley and free of all noxious weeds. Straw that is rotted or has been used for stable bedding shall not be used. No invasive exotic plants or seed shall be used.

Straw should be spread on all areas with bare soil.

Time Line

- Approval of Proposed Re-vegetation Plan Summer 2020
- Planting/ Seeding Winter 2020
- 1st Monitoring Report Spring / Fall 2022

Monitoring Plan

Project Monitoring

A monitoring plan is essential for assurance of the goals of the revegetation plan. The monitoring plan proposed is an assessment of the project upon completion of the prescribed work at the end of years one, two, and three. At the end of three years total survivorship should be 80% of the total planted stock as per the performance standard.

To ensure a successful revegetation effort all plantings shall be monitored (survival counts and photo monitoring) and maintained as necessary for a minimum of three years.

Performance Standard

A performance standard of 80% survival of planted stock and 70% vegetation coverage of the all bare soil caused by removal of non-permitted structures at the end of the monitoring period is proposed as a success standard for compliance by this project.

If the survival and or cover requirements are not meeting these goals, the permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice, to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for three years after planting.

A report will be filed with the County at the end of each monitoring period. Monitoring should be conducted in the fall a year following planting. Monitoring reports should be submitted to the by October 15th of each year.

Annual maintenance visits will include inspection for any evidence of vandalism. Observed evidence of excessive human disturbance will be recorded, along with remedial action(s) being taken. Photos will be taken from the same points every year.

Monitoring Report Contents

- 1.0 Project Information
 - 1.1 Project name
 - 1.2 Applicant name, address, and phone number
 - 1.3 Consultant name, address, and phone number
- 2.0 Mitigation Site Information
 - 2.1 Location of the site (including regional map)
 - 2.2 Specific purpose/goals for the mitigation site
 - 2.3 Date planting was completed
 - 2.4 Dates summary of previous monitoring visits
 - 2.5 Name, address, and contact number of responsible parties for the site
 - 2.6 Summary of remedial action, if any
- 3.0 Tabulated Results of Monitoring Visits, Including Previous Years.

- 4.0 Summary of Field Data
- 5.0 Photo Monitoring
- 6.0 Problems Noted and Proposed Remedial Measures

Location Map
Site Map

Contingency Plan and Adaptive Management

Death of the planted stock will necessitate replanting. Yearly monitoring for achievement of the success will identify problems and remedial adaptive management to correct any problems will be implemented.

Responsible Party for Short –Term and Long-Term Maintenance

Responsible party for development, short term maintenance and long-term maintenance will be Rutherford Ranch Winery. It is the owner’s responsibility to submit reports or contact a qualified biologist to conduct monitoring and submit monitoring reports.

Should you have any questions, please do not hesitate to contact us at: telephone (707) 544-3091, Email kjeldsen@sonic.net, or by fax (707) 575-8030.

Plate I. Planting Plan

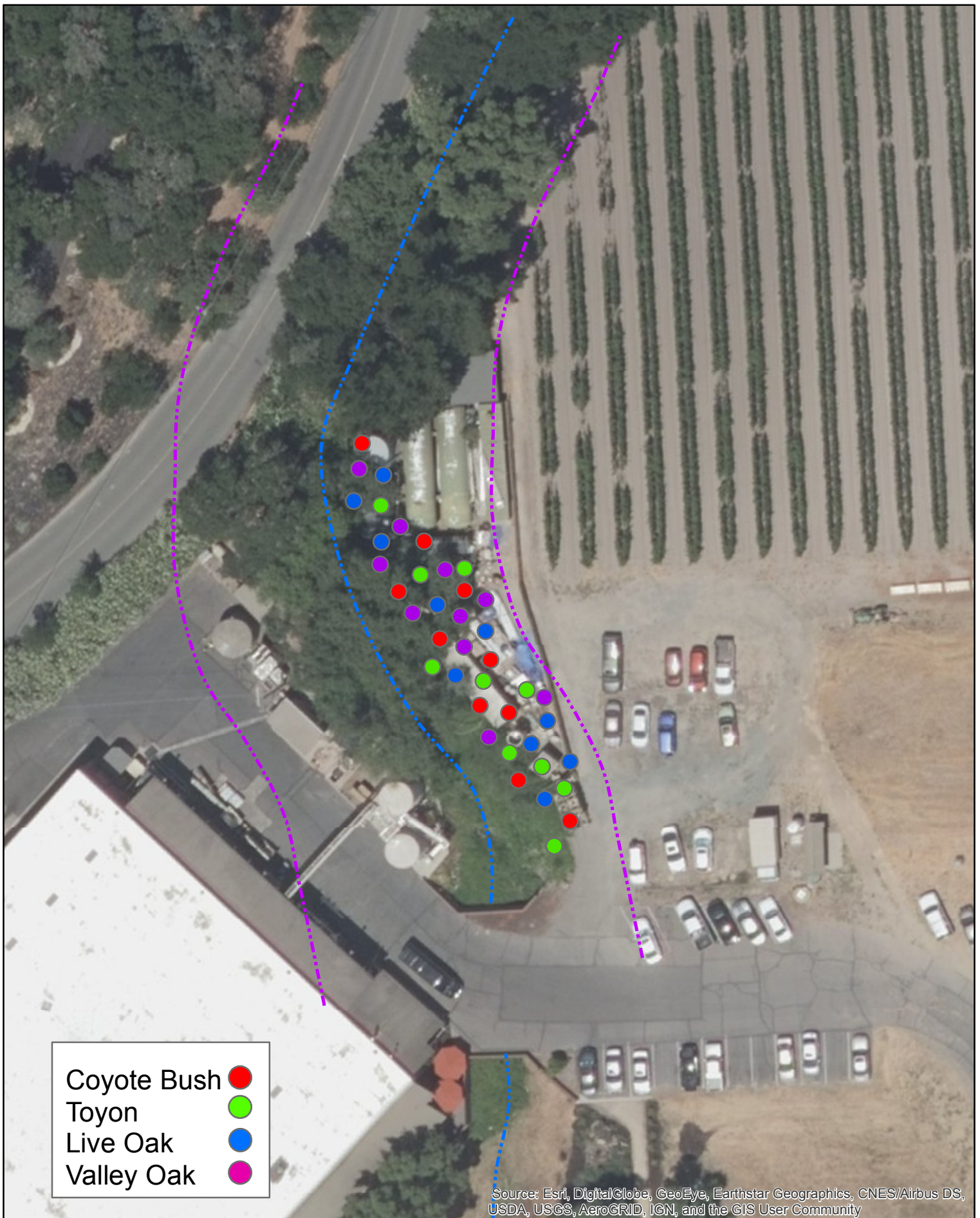


Plate I. Aerial Photo / Planting Plan

