GRADING PERMIT APPLICATION

Planning, Building & Environmental Services
1195 Third Street, Suite 210
Napa, CA 94559-3082
(707) 253-4417

A Tradition of Stewardship
A Commitment to Service

Applicant Information (if different from property owner):

1. Name (First and Last or Company Name)
PPI Engineering

Street Address
2800 Jefferson Street

City: Napa | State: CA | Zip: 94558

Phone Number: 707-253-1806 | Applicant Title: Consultant

E-mail Address
mbueno@ppiengineering.com

Property Owner Information:

2. Name (First and Last or Company Name)
Constellation Brands Inc

Street Address
PO Box 106

City: Oakville | State: CA | Zip: 94562

Phone Number

E-mail Address
harinder.dhaliwal@cbrands.com

Project Information:

3. Site Address:
2155 Ramal Road, Napa, CA 94558

Assessor's Parcel No.:
047-271-002

4. Project Description (Attach drawings to application):

The proposed scope of work is a new +/-75 ac-ft agricultural water storage reservoir. The new reservoir will be constructed within existing vineyard area that is currently fallow. The vineyard was removed under ECP#P20-00169. The new reservoir will be filled with recycled water from the Napa Sanitation District. A water purchase agreement with Napa Can has been obtained. The proposed reservoir is for vineyard irrigation.

5. Approximate Area of Disturbance: 6.5 ac

6. Will natural drainage be affected? ☐ Yes ☑ No

7. Cut Information: 7a. Estimated Quantity (CY) 65,000 | 7b. Estimated Depth (FT) 27

8. Fill Information: 8a. Estimated Quantity (CY) 65,000 | 8b. Estimated Depth (FT) 29

9. If creating a reservoir: Estimated Storage (AC-FT) 75

Application Fees:

Application fee for processing a grading permit is based on an hourly fee of $146 per hour in accordance with the Napa County Policy Manual Section 75.020 as revised by the Board of Supervisors on July 31, 2018, Resolution 2018-102 All grading permit applications require a $2,000.00 deposit to file. There will be a 3.3% surcharge added per Section 75.015. Any portion of a deposit not used for issuance of a grading permit (including inspections) shall be refunded to applicant .

THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY PERMITS REQUIRED BY OTHER AGENCIES.

I HEREBY CERTIFY THAT THE INFORMATION SUPPLIED BY MYSELF OR MY REPRESENTATIVE IN CONNECTION WITH THIS PERMIT APPLICATION IS TRUE.

Signature of Owner: _____ Date: 2/6/2023

Signature of Applicant: _____ Date: 2/6/2023

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Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

David Morrison
Director

PROJECT GUIDANCE FOR STORMWATER QUALITY COMPLIANCE

PROJECT INFORMATION

Project Name: Carneros Vista Reservoir

Project Number:

Project Address: 2155 Ramal Road

Assessor's Parcel Number: 047-271-002

Existing Development Permits Under Review or Issued:

EROSION & SEDIMENT CONTROL PLAN (ESCP) APPLICABILITY

Under Provision E.10 of a statewide Phase II municipal stormwater NPDES permit reissued by the California State Water Resource Control Board in 2013, requires Napa County to establish and enforce an erosion and sediment control program to minimize the discharge of sediment and construction related pollutants. All individuals undertaking public or private construction or ground disturbing activities must take steps to prevent the discharge of pollutants resulting from these activities. Specified projects that require local permits or trigger ground disturbance thresholds must prepare plans describing the BMPs that will be implemented. Refer to Napa County's Erosion and Sediment Control Plan Guidance Table 3, Levels of Erosion and Sediment Control Requirements, for a summary of the general levels of requirements that are further described in the guidance document. Please respond to the following questions.

1. Does the project require a Grading Permit? Yes [✓] No [ ]

2. Does the project proposed soil disturbance greater or equal to 10,000 square feet? Yes [✓] No [ ]

   Proposed Disturbed Soil Area: 6.5 sq.ft. [ ] acres [✓]

3. Does the project propose soil disturbance on slopes greater or equal to 5%? Yes [✓] No [ ]

   Maximum Percent Slope: 17%

4. Does the project propose installation of new and/or reconstructed storm drains which discharge to a municipal storm system or receiving water body? Yes [ ] No [✓]

For County Use Only:

	High	Medium	Low	N/A
Threat to Water Quality	[ ]	[ ]	[ ]	[ ]

Construction General Permit WDID# (if applicable):

POST-CONSTRUCTION STORMWATER CONTROL PLAN (SCP) APPLICABILITY

Under Provision E.12 of a statewide Phase II municipal stormwater NPDES permit reissued by the California State Water Resource Control Board in 2013, requires Napa County to regulate development projects to control pollutants in runoff from newly created or replaced impervious surface. Prior to submittal of a use, building, or grading permit, applicants must determine the Project Type, Project Requirements and submittal requirements. Refer to Napa County's BASMAA Post- Construction Manual Table 1-1, Requirements at a Glance, for a summary of project type requirements.

TYPE OF PROJECT:

Single Family Dwelling*	☐	Larger Plan of Development	☐
Commercial / Industrial / Non-Residential	☑	Roads / Linear-Utility Project (LUP)	☐

Total New or Replaced Impervious Surface Area (sq.ft.):	N/A
Total Pre-Project Impervious Surface Area (sq.ft.): Total	N/A
Post-Project Impervious Surface Area (sq.ft.):	N/A

*Single-Family home or dwelling unit means a dwelling unit containing not more than one kitchen, designed to be occupied by not more than one family, and includes a manufactured home as defined in Section 18.08.360 which is installed on a permanent foundation and certified under the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. Sections 5401 and following).

For County Use Only:

	Single-Family Dwelling	Small Project	Regulated Project	Roads & LUPs	N/A
Project Category	☐	☐	☐	☐	☐

Operation & Maintenance Agreement Required: Yes ☐ No ☐

I hereby certify that the information presented herein by myself or my representative is accurate and complete. Incorrect information on proposed activities or uses may delay your application(s) or permit(s).

Name of Owner / Agent:	Title:
Matt Bueno	AUTHORIZED AGENT

Signature of Owner / Agent	Date:
[signature]	2/6/2023

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County of Napa

AGENT AUTHORIZATION

Only the Owner, Contractor or their Authorized Agent may submit plans for permits. To authorize a third party agent, the agent must bring this signed form, or a wet signed letter, which identifies them and the person they are representing, and for what jobs they may obtain permits. The letter must contain all the information requested on this form.

This form must accompany ALL applications that are being filed by an Authorized Agent.

Faxes Are Not Accepted.

As the owner of the property, I understand that the application for any permit (i.e. Grading, Building, Plumbing, Mechanical and/or Electrical, etc.) must be signed by the Owner of the property, his/her duly Authorized Agent, or licensed Contractor. This procedure also applies to the Contractor's Agents.

I understand that I may designate a third party, such as a tenant or person in my employ, to sign the application for a permit on my behalf. I further understand that the person's only responsibility or function is to acquire a permit on my behalf.

I am aware that the responsibility for the construction and compliance to codes and ordinances is entirely mine and I accept the same.

Therefore, as the owner or authorized agent of the above listed property,

I do hereby authorize (Please Print) Matt Bueno

To apply/obtain a permit from Napa County for an agricultural water storage reservoir.

in my name by affixing my name followed by their Signature on the application.

OWNER: Constellation Brands Inc.

OWNER ADDRESS: P.O. Box 106, Oakville, CA 94562

OWNER PHONE #: 707-256-9258

AUTHORIZED AGENT: Matt Bueno

AUTHORIZED AGENT PHONE #: 707-363-0981

AUTHORIZED AGENT ADDRESS: 2800 Jefferson Street, Napa CA 94558

CONTRACTOR/ENGINEER/ARCHITECT CALIFORNIA LICENSE #: C84114

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

October 11, 2022

Harinder Dhaliwal
Constellation Brands Inc. US Ops
7801 St. Helena Highway
Oakville, CA 94562

Dear Mr. Dhaliwal:

Notification of Lake or Streambed Alteration, EPIMS Notification No. NAP-31500 R3, Carneros Vista Ranch Directional Boring Pipeline

The California Department of Fish and Wildlife (CDFW) had until October 10, 2022, to submit a draft Lake or Streambed Alteration Agreement (Agreement) to you or inform you that an Agreement is not required. CDFW did not meet that date. As a result, by law, you may now proceed with the project described in your notification without an Agreement.

Please note that pursuant to Fish and Game Code section 1602, subdivision (a)(4)(D), if you proceed with this project, it must be the same as described and conducted in the same manner as specified in the notification and any modifications to that notification received by CDFW prior to October 3, 2022. This includes completing the project within the proposed term and seasonal work period and implementing all avoidance and mitigation measures to protect fish and wildlife resources specified in the notification. If the term proposed in your notification has expired, you will need to re-notify CDFW before you may begin your project. Beginning or completing a project that differs in any way from the one described in the notification may constitute a violation of Fish and Game Code section 1602.

Your notification includes, but is not limited to, the following:

- Frac-Out Avoidance and Minimization Plan
- Pre-construction surveys for special-status species
- General nesting bird surveys and protocol-level surveys for Swainson's hawk (*Buteo swainsoni*) if work is conducted during nesting season (February 1 – August 31)
- Immediately stop and notify CDFW if a frac-out occurs when there is standing or flowing water in the stream and obtain an Incidental Take Permit for California freshwater shrimp (*Syncaris pacifica*)

Also note that while you are entitled to complete the project without an Agreement, you are still responsible for complying with other applicable local, state, and federal laws. These include, but are not limited to, Fish and Game Code sections 2080 *et seq*. (species listed as threatened or endangered, or a candidate for listing under the

California Endangered Species Act); section 1908 (rare native plants); sections 3511, 4700, 5050, and 5515 (fully protected species); section 3503 (bird nests and eggs); section 3503.5 (birds of prey); section 5650 (water pollution); section 5652 (refuse disposal into water); section 5901 (fish passage); section 5937 (sufficient water for fish); and section 5948 (obstruction of stream).

Finally, if you decide to proceed with your project without an Agreement, you must have a copy of this letter and your notification with all attachments available at all times at the work site.

If you have questions regarding this letter, please contact Alicia Bird, Environmental Scientist, at (707) 980-5154 or by email at alicia.bird@wildlife.ca.gov; or Melanie Day, Senior Environmental Scientist (Supervisory), at (707) 210-4415 or by email at Melanie.Day@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Craig Weightman
7988F6C4FDCE4F21

Craig J. Weightman
Environmental Program Manager
Bay Delta Region

From: Bird, Alicia@Wildlife <Alicia.Bird@Wildlife.ca.gov>
Sent: Friday, September 23, 2022 12:58 PM
To: Annalee Sanborn <ASanborn@PPIEngineering.com>
Cc: Jim Bushey <JBushey@PPIEngineering.com>; Matt Bueno <MBueno@PPIEngineering.com>
Subject: RE: NAP-31500 - Carneros Vista Ranch Directional Boring Pipeline

Hi Annalee,

I had a clarifying question after our phone call earlier this week. The notification does indicate the Project will avoid the nesting season or do nesting bird surveys. However, Swainson's hawk has the potential to occur at the project site. Swainson's hawk is state listed as endangered, so we do require protocol level surveys for this species, which are a bit more involved than standard nesting bird surveys. Would you be able to confirm that the Project will follow the measure included below? If you can provide your agreement via email, I will add this correspondence to be included as part of the formal notification.

Thank you,
Alicia

Swainson's Hawk Surveys and Avoidance. If Project activities are scheduled during the nesting season for Swainson's hawks (March 1 to August 31), prior to beginning work on this Project, a Qualified Biologist shall survey for Swainson's hawk nesting activity. The survey area shall include a 0.5-mile radius surrounding the Project site. The Qualified Biologist shall conduct surveys according to the *Recommended timing and methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline). Survey results shall be submitted to CDFW for review and written acceptance prior to starting Project activities. If the Qualified Biologist identifies nesting Swainson's hawks, then Project activities shall be prohibited within 0.5 miles of the nest between March 1 and August 31, unless otherwise approved in writing by CDFW, which may include consultation pursuant to CESA and the Permittee obtaining a CESA Incidental Take Permit, or a Qualified Biologist determining that the nest is no longer active.

From: Annalee Sanborn <ASanborn@PPIEngineering.com>
Sent: Monday, September 26, 2022 9:22 AM
To: Bird, Alicia@Wildlife <Alicia.Bird@Wildlife.ca.gov>
Cc: Jim Bushey <JBushey@PPIEngineering.com>; Matt Bueno <MBueno@PPIEngineering.com>
Subject: RE: NAP-31500 - Carneros Vista Ranch Directional Boring Pipeline

Good morning Alicia,

Yes, we are more than happy to follow the measure included in your email below.

Thank you for checking,

Annalee Sanborn
asanborn@ppiengineering.com
Senior Project Manager | PPI Engineering, Inc.
2800 Jefferson Street
Napa, CA 94558
(707) 253-1806
www.ppiengineering.com

From: Bird, Alicia@Wildlife <Alicia.Bird@Wildlife.ca.gov>
Sent: Friday, October 07, 2022 10:23 AM
To: Annalee Sanborn <ASanborn@PPIEngineering.com>
Cc: Jim Bushey <JBushey@PPIEngineering.com>; Matt Bueno <MBueno@PPIEngineering.com>
Subject: RE: NAP-31500 - Carneros Vista Ranch Directional Boring Pipeline

Hi Annalee,

I had one other question that was raised during supervisory review of this project. California freshwater shrimp, which is an endangered species, is known to occur in Huichica Creek. There is a documented historical occurrence in the California Natural Diversity Database less than a mile just upstream of the project site. In the off chance that frac-out occurs and the stream is wet, this could negatively impact freshwater shrimp. Because California freshwater shrimp is an endangered species, take of this species is prohibited under the California Endangered Species Act. In order to avoid unauthorized take of this listed species, the project could follow the following measure:

California Freshwater Shrimp Protection. If frac-out occurs when there is standing or flowing water in the stream, project activities shall immediately stop and the Project shall immediately notify CDFW. If impacts to California freshwater shrimp cannot be avoided, Permittee shall obtain a CESA Incidental Take Permit from CDFW before proceeding with the project.

If you can provide agreement via email that the project will follow the above measure and agrees to incorporate this measure as part of their notification package, I will add this correspondence to be included in your EPIMS notification as with the Swainson's hawk measure.

Thank you,
Alicia

From: Annalee Sanborn <ASanborn@PPIEngineering.com>
Sent: Monday, October 10, 2022 10:36 AM
To: Bird, Alicia@Wildlife <Alicia.Bird@Wildlife.ca.gov>
Cc: Jim Bushey <JBushey@PPIEngineering.com>; Matt Bueno <MBueno@PPIEngineering.com>
Subject: RE: NAP-31500 - Carneros Vista Ranch Directional Boring Pipeline

Good morning Alicia,

Yes, we will agree to the term below. Thank you!

Annalee Sanborn
asanborn@ppiengineering.com
Senior Project Manager | PPI Engineering, Inc.
2800 Jefferson Street
Napa, CA 94558
(707) 253-1806
www.ppiengineering.com

Frac-out Plan for Directional Boring of Huichica Creek

Scope of Work

Directionally drill and install 480 feet of 8" HDPE for a recycled water pipeline with 25 feet of cover beneath Huichica Creek

Equipment

- Drill Rig - Ditch Witch JT4020 Directional Drill Rig
  Ditch Witch manufactured the drill rig that will be used for this project. Rig has 40,000 lbs of pull capacity, 5,000 ft lbs of rotary torque, and 100 gallons per minute pump capacity
- Northern Equipment Mud Mixing System - Tank Capacity: 2,000 gallons
- Vermeer R300 Mud Recycling System
- Peterbilt 3,000 gallon vacuum truck
- Ditch Witch 800 gallon vacuum trailer

Project Layout Drawings

See Project Profile

Site Specific Resources of Concern

Crossing of Huichica Creek will be accomplished by horizontal directional drilling approximately 25 feet under the creek. Excavation of the bore pits will be at least 200 feet from the upper banks of the Creek.

Entry pit dimensions will be approximately 15'L x 6'W and will be covered at the end of each workday. Set up space for the drill rig and support equipment will occupy an area of approximately 100' x 50'. The pipe insertion pit will be approximately 30' L x 6'W. The pipe will be fused into one continuous piece going 500 feet west and away from the creek.

Frac Plan Objectives

• Minimize the potential for a frac-out by properly preparing the borehole by using suitable tooling and drilling fluid additives.
• Provide the timely detection of any frac-outs that could enter the Creek.
• Facilitate notification of all appropriate agencies immediately and documentation of any incident.
• Facilitate proper response, containment and cleanup in the event a frac-out occurs.

Responsibilities

• Monitoring for hydraulic fracturing during the performance of the work.
• Minimize potential for a Frac out.
• Detection of any Frac-outs.
• Notification of the Frac-out to the proper representative
• Containment of the Frac-out.
• Cleanup of the Frac-out
• Documentation of the Frac-out

Pre-Construction Frac-out Prevention

Frac-out prevention operations begin with the employment of skilled and competent workers who are familiar with HDD construction and have performed many crossings of multiple complexities and are well versed in monitoring for Frac-out's and the warning signs that are often a precursor to a frac-out.

Drilling fluids will likely consist of water, bentonite clay, and detergent. Lost Circulation Material (LCM) may be used in case of a Frac-out or loss of circulation.

The basic drilling fluid properties of concern include:
• Viscosity
• Fluid Density
• Sand (solids) content
The HDD crew will continuously monitor and evaluate soil conditions and fluid properties and adjust the drilling fluid as necessary during drilling operations.

Qualified Monitor from NDDI – Chad Morgensen – Owner of NDDI, 24 years experience in Horizontal Directional Drilling See Attached Resume

Northern Directional Drilling – Established 2008 – See Attached Resume

Adjustments of the basic drilling fluid properties may be desired in certain circumstances to match drilling fluid properties with actual soil types to achieve a more stable borehole, improve cuttings return, and/or to reduce frac-out potential during difficult drilling circumstances. Pump pressures will be monitored continuously. The drill rig operator will be continuously monitoring mud flow and mud pressure gauges on the drill rig. Constant communication between the drill rig operator and crews at each bore pit will be maintained to ensure proper drilling mud returns to each bore pit. The job site superintendent and the foreman will be continuously monitoring the viscosity and consistency of drilling mud returns to ensure a properly reamed borehole and prevent frac-outs.

Loss of Fluid Recovery

In many cases, the loss of mud or sudden changes in fluid recovery will provide an early indication that down-hole conditions may be susceptible to a frac-out. Fluid recovery is therefore monitored on a continuous, or near continuous basis. Plugging of the bore-hole annulus or the presence of a major formation fracture will typically lead to partial or full loss of drilling fluid circulation. It is possible to monitor fluid loss by watching for

significant differences between the fluid rate versus the rate of returns flowing into the entry and pits.

Should the drill rig operator feel that fluid circulation is slowing or is about to stop then the operator will immediately implement the following procedures:
1. Temporarily cease drilling operations and shut off the mud pumps.
2. Dispatch observers as required, to monitor the area along the bore alignment.
3. If no drilling fluids are seen on the ground surface, the mud pumps will be started and volumes gradually increased as the drill pipe is pulled back, to wipe the bore-hole annulus and encourage flow. Depending on the success of this procedure, the properties of the drilling fluid may be altered to aid in restoring circulation. Observers will continuously monitor the area for frac-outs as long as the mud pumps are in operation. If circulation is re-established, drilling will proceed as usual and monitoring for frac-outs will become more routine as long as circulation is maintained. If circulation is not re-established, monitoring will continue while the pump is on. Typically lost circulation has the highest probability of occurring while the pilot hole is being drilled. This is due to the smaller borehole annulus and the relatively large amounts of cuttings being carried in the drilling fluids. Often times the pilot hole, circulation may be temporarily lost as the pilot bit is advanced through more permeable sections of the formation and fluid pressures are at a maximum. Under these circumstances, the loss of fluid may not indicate that a frac-out has occurred. As the pilot bit advances beyond the zone of lost circulation, fluid pressure will return to normal and circulation within the borehole will be re-established. It is not uncommon for drilling fluids to leave the borehole and migrate in a direction other than to the surface and never be observed even if lost for extended periods.

Frac-out Response

If drilling fluid returns are observed on the ground surface at a location other than the bore containment pits and at a location that is accessible, the following procedures will be implemented.
1. Cease drilling operations
2. Notify all required parties
3. Document the event.
4. Contain the mud with gravel bags, straw bales and or wattles or so the fluid cannot migrate from the fracture location. If the frac-out occurs in areas with water then the 55 gallon drum will be placed over the frac-out for containment and the mud vacuumed from drum. Sandbags can be placed around garbage cans to prevent seepage.
5. If possible, excavate a small sump pit at the fracture location and provide a means of containment for the fluid while it is returned to either the drilling site for cleaning and re-use or to an approved dump site.
6. Clean up affected area using brooms, shovels etc.
7. Adjust drilling fluid properties to inhibit flow through the fracture and wipe the hole by tripping out drill pipe to wipe the bore-hole annulus.
8. If necessary, determine the suitability of placing LCM in the hole.
9. After allowing the formation to “rest” for a suitable period, continue drilling while monitoring the frac-out location and transferring fluids as necessary.

10. Consider drilling a relief well over the top of the borehole, in order to relieve annular pressure.
11. Ream the bore-hole up to the Frac out location to relieve annular pressures.

If a Frac-out occurs, drilling will stop and representatives for the owner and the project engineer will be notified immediately. No further drilling will take place until notification to proceed has been received from the project engineer.

If a Frac-out is observed in a location that is inaccessible, the following procedures will be implemented.

1. Cease drilling operations.
2. Clean up affected area
3. Execute all reasonable measures within the limitations of the technology to re-establish circulation, including the following.
    a. Trip back the drill pipe to wipe the borehole annulus
    b. If necessary, place LCM in the hole.
    c. Consider changes to drilling fluid properties.
    d. Propose alternate drilling techniques.
    e. Consider drilling a relief well over the top of the borehole, in order to relieve annular pressure.
    f. Ream the bore-hole up to the Frac out location to relieve annular pressures.
4. Continue drilling with minimum fluid.
5. Propose an alternate bore plan that avoids the problematic area.
6. Document the event.
7. Notify all required parties.

Often times drill cuttings generated as a result of the drilling process will naturally bridge and subsequently seal fractures or voids in the formation as drilling progresses, thus providing another means to reestablished lost circulation. This is particularly likely during the reaming process as higher volumes of cuttings are being generated.

Frac-out Control Equipment

In accordance with good HDD practices, the following Frac-out containment and cleanup equipment should be present on or near the project site.

- Heavy weight plastic clean gravel filled sand bags (at least 20 bags)
- Geotek filter bags 10-by-12-foot size or equivalent (at least 3 bags per segment)
- Several hard plastic (5-gallon) buckets
- 55 gallon drum for water frac-out containment
- One wide heavy-duty push broom
- Three flat blade shovels
- Two bundles of absorbent pads to use with plastic sheeting
- Straw logs (wattles or fiber rolls)(at least two 10-foot rolls)
- Portable pumps
- A minimum of 100 feet of hose;
- Vacuum truck (800 and 3000-gallon)

Chad Morgensen
Owner/Superintendent

Chad Morgensen has over 25 years of experience in Horizontal Directional Drilling including numerous crossings with California Department of Fish and Wildlife. This experience on Fish and Wildlife permitted projects includes working with Biological Monitors to monitor creeks and riparian areas for potential frac-outs and discuss drill procedures and mud composition to reduce the risk of frac-outs of drilling mud.

His experience includes the following.

Fish And Wildlife Crossings

- Directionally drill and install 500 feet of 3" HDPE beneath Pescadero Creek in 2022.
- Directionally drilled and install 650 feet of 32" FPVC for a City of Napa water main beneath Sarco Creek.
- Directionally drilled and installed 1,800 feet of 16" FPVC pipe beneath Arroyo Mocho Creek in Pleasanton, CA.
- Directionally drilled and installed 350 feet of 24" HDPE pipe and 250 feet of 18" HDPE pipe beneath Huichica Creek in Napa.
- Directionally drilled and installed 800 feet of 12" FPVC pipe beneath Coyote Creek for Dublin San Ramon Services District.

Other Projects in Senstive Areas

- Directionally drilled and installed 1300 feet of four 4" PVC conduits beneath a wetland at the Oakland Airport.
- Directionally drilled and install 1,300 feet and 600 feet of 14" HDPE pipe beneath a golf course in Concord.
- Directionally drilled and installed 630 feet of 8", 10" and 4" fusible PVC beneath sensitive areas in Pleasanton.
- Directionally drilled and install 320 feet of 18" and 20" HDPE pipe beneath sensitive areas in Tiburon.
- Directionally drilled and install 1,300 feet of 10" for a force sewer main in Half Moon Bay.
- Directionally drilled and installed 300 feet of 32" HDPE pipe in Milpitas for a siphon beneath the Hetch Hetch water mains in 2007.

Northern Directional Drilling, Inc.
Experience List

Project: Memorial Park Water Main Replacement
Owner: San Mateo County & San Mateo Resource Conservation District
Location: La Mar, California
Scope: Drill and install 500 feet of 3" HDPE pipe 20 feet beneath Pescadero Creek
Completed: April 2022
Contractor/Client: Westland Contractors, Inc.

Project: Willow Lake Water Main Replacement
Owner: Town of Discovery Bay
Location: Discovery Bay, CA
Scope: Drill and install 400 feet of 8" HDPE pipe 15 feet beneath Willow Lake
Completed: April 2021
Contractor/Client: Westland Contractors, Inc

Project: Sarco Creek Water Main Replacement
Owner: City of Napa
Location: Napa, California
Scope: Drill and install 650 feet of 32" fusible PVC beneath Sarco Creek.
Completed: June 2016
Contractor/Client: Garney Construction

Project: Pleasanton Recycled Water Infrastructure
Owner: City of Pleasanton
Location: Pleasanton, California
Scope: Drill and install 1,500 feet of 16" fusible PVC beneath Coyote Creek.
Completed: October 2015
Contractor/Client: Ranger Pipeline

Project: Offsite Water Improvemnts
Owner: Gasser Foundation
Location: Napa, California
Scope: Drill and install 440 feet and 330 feet of 16" fusible PVC beneath wetlands.
Completed: June 2014
Contractor/Client: Garney Construction

Project: Central Dublin Recycled Water Main
Owner: Dublin San Ramon Services District
Location: Petaluma, California
Scope: Drill and install 1,600 feet of 12" fusible PVC in two bores.
Completed: August 2012
Contractor/Client: McGuire & Hester

Project: Naples Beach Pump Station and Force Main
Owner: Granada Sanitary District
Location – Half Moon Bay
Scope: Directionally drill and install 1,300 feet of 10” fusible PVC pipe
Completed: March 2012
Contractor: Bay Pacific Pipelines

Project: Wetland Crossing for New Traffic Control Tower
Owner: Oakland Airport
Location: Oakland, California
Scope: Drill and install 1,300 feet of 10" OD fusible PVC pipe in two locations.
Completed: October 2011
Contractor/Client: Devcon

Application

10147 - Notify for Standard Agreement (Cannabis and non-Cannabis) - Final Application

31500 - Carneros Vista Ranch Directional Boring Pipeline
Region 3

Status: Submitted

Submitted Date: 07/12/2022 12:01 PM

Additional Contacts: Harinder Dhaliwal
Select any additional contacts within your organization that will also manage this Permit

While an Applicant is legally responsible for complying with Fish and Game Code section 1602 and all measures and conditions of a final agreement, an Applicant may designate and authorize an agent (e.g., lawyer, consultant, or other individual) to act as Designated Representative.

*The Designated Representative is authorized to sign the notification and any agreement on behalf of the Applicant. The Designated Representative listed here **must** be list in the "Additional Contact" field above to receive emails associated with the application and permit.*

Designated Representative: Annalee Sanborn

Applicant Information

Applicant:

- **User accounts must be registered using an individual's name.** If you are applying for an organization (e.g., business, governmental agency, etc.) you can associate that organization with your user account during the registration process. If you are an agent (e.g., lawyer or consultant) for an applicant, both you and your client must have user accounts. The applicant is responsible for complying with the terms and conditions of the agreement.
- **Register for only one user account.** A single user account may be associated with multiple notifications/applications and/or multiple organizations. If you do not receive an automated confirmation email within a few minutes of registering, please check your Spam/Junk email folder.
- **New User Registration Approval** is not automated and may take up to 72 hours. Once approved, you will receive two emails, one containing your User ID, and one containing your temporary password. These emails may also go to your Spam/Junk email folder.
- **DO NOT** USE ALL CAPITAL LETTERS WHEN COMPLETEING THIS FORM.
  - **NOTE**: If ALL CAPS are used in any field on this form, the registration will be denied.

Title:	Mr.	Harinder First Name	Singh Middle Name	Dhaliwal Last Name
User Email:*	harinder.dhaliwal@cbrands.com			
User Address:*	7801 St. Helena Highway			
*	Oakville City	California State/Province	94562 Postal Code/Zip	
User Phone:*	707-256-9258 Phone		Ext.	

Organization Information

- **Registered users should provide the name of the primary organization they are associated with.** Other organizations can be associated with the user after the registration process.
- Enter the full name of the organization. **DO NOT USE ABBREVIATIONS OR ACRONYMS.**
- **DO NOT** USE ALL CAPITAL LETTERS WHEN COMPLETEING THIS FORM.
  - **NOTE**: If ALL CAPS are used in any field on this form, the registration will be denied.

Organization Type:*	Business		
Organization Name:*	Constellation Brands Inc. US Ops		
Organization Website URL:	www.cbrands.com		
Address:*	7801 St Helena Hwy		
*	Oakville City	California State/Province	94562 Postal Code/Zip
Phone:*	707-200-5222		Ext.

Project Location

Project Location 1	
"Project Name" used here refers to the activities (project) that are subject to the notification requirements in Fish and Game Code section 1602 and not the overall project identified previously in the General Information form. For example, if the project includes the construction of one bridge, one culvert, and road grading adjacent to a stream, this would constitute three projects. You can name the bridge Smith Bridge as project one, Smith Culvert as project two, and Road Grading as project three. In this example, you would be required to fill out this section three times to identify each project. Refer to the LSA Fee Schedule for more information. Project Name:*	Carneros Vista Ranch Directional Boring Pipeline
Response:*	Yes
Provide the street address where the project will take place. Project Site Address:*	Duhig Road
City:*	Napa
Name Other:*	
Zip Code:*	94559
If there is no street address: • **Provide a description of the location with reference to the nearest city or town.** • **Provide driving directions from a major road or highway.** • **Provide a map that marks the location of the project and denotes a north arrow and map scale in the Documents and Maps form.** **Project Site Description:***	
Access Google Maps Help to find your GPS latitude and longitude coordinates. GPS Coordinates:*	38.229692
Longitude:*	-122.355217
Provide the name of the county where the project will take place. If you do not see your county on this list, you are applying to the wrong region. Return to the Main Menu and start a new application in the correct region. County: *	Napa County
Assessor's Parcel Number can be found on deeds and tax records. Property APN:*	
Assessor's Parcel Number can be found on deeds and tax records. Property APN:*	
Assessor's Parcel Number can be found on deeds and tax records. Property APN:*	
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Assessor's Parcel Number can be found on deeds and tax records. Property APN:*	
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Assessor's Parcel Number can be found on deeds and tax records. Property APN:*	
Assessor's Parcel Number can be found on deeds and tax records. Property APN:*	
Project Category:*	New Construction
The work type, "Water diversion without facility" refers to extracting water from a river, stream, or lake without physically obstructing or impeding its natural flow (e.g., by using a pump or by gravity through a headgate, pipe, or gallery). The work type, "Water diversion with facility" refers to extracting water from a river, stream, or lake in conjunction with or by use of a facility or structure that physically obstructs or impedes its natural flow (e.g., a flashboard dam or a weir). Work Type: *	Utility crossing: Horizontal Directional Drilling
Describe Other Work Type:*	
Response:*	No
Provide the name of the stream or lake in or near where the project will occur. If the river, stream or lake is unnamed, please select	Huichica Creek

"unnamed stream or lake" in the drop-down box. **The following websites may assist you in identifying the name of the stream or lake in or near the project.** • **EPA Maps** • **USGS The National Map** **Disclaimer – CDFW cannot and does not portray the links provided above as an exhaustive and comprehensive inventory of all river, streams, or lakes statewide. Field verification will always be an important obligation of the applicant.** **River, Stream, or Lake Affected:***	
Describe Other:*	
Provide the watercourse or waterbody to which the stream or lake identified above is tributary. • **EPA Maps** • **USGS The National Map** **Disclaimer – CDFW cannot and does not portray the links provided above as an exhaustive and comprehensive inventory of all river, streams, or lakes statewide. Field verification will always be an important obligation of the applicant.** **Waterbody Tributary:***	Huichica Creek
Describe Other:*	
Water Present during Work Period:	Yes
Work in Wetted Portion of Channel:*	No
The State Wild and Scenic Rivers Act (WSRA) is codified at Public Resources Code section 5093.50 et seq. and can be found at California Wild and Scenic Rivers Act. ***If the project is located within a segment of a river or stream that is listed in the State or federal WRSA, CDFW cannot approve the proposed project unless it is consistent with the act(s).*** **Wild and Scenic Rivers?:***	No
Wild and Scenic River Affected by Project:*	

Project Description and Details

Is the 'Property Owner' the same person as the 'Applicant Proposing Project'?

Response:* Yes

Provide the name, mailing address, telephone number, and e-mail address of the owner of the property where the project activities will take place, if different from the applicant proposing the project.

First Name Middle Initial Last Name

If there are multiple Property Owners associated with this notification, please include a Word Doc with the names and contact information for each person to the Documents and Maps form.
Name:*

City:* State:* Zip:*

Include all of the following:

- **Include any structures (e.g., rip-rap, culverts) that will be placed or modified in or near the stream, river, or lake, and any channel clearing.**
- **Specify volume, and dimensions of all materials and features (e.g., rip-rap fields) that will be used or installed.**
- **If water will be diverted or extracted, specify the purpose or use.**
- **Describe both permanent and temporary impacts to the channel and/or riparian habitat.**

On the Documents and Maps form, attach photographs of the project location(s) and immediate surrounding area. Include diagrams, drawings, plans, and maps that provide all of the following:

- **Site specific construction details.**
- **Dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain.**
- **Overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and activity, significant area features, stockpile areas, areas of temporary disturbance.**
- **Where the equipment/machinery will access the project area.**

Describe the Project in Detail:*

The project proposes to directionally drill and install 500 feet of 8" HDPE pipe below Huichica Creek for a new recycled water pipeline. There will be a minimum of 25 feet of cover below Huichica Creek.

Character Limit: 10,000

List all equipment and machinery used to complete the project. List any lubricants, solvents, chemicals, or other materials not normally found on construction sites that will be present in the project area in addition to the equipment and machinery used to complete the project.
Describe Equipment and Machinery:*

Drill rig, northern equipment mud mixing system, mud recycling system, vacuum truck, vacuum trailer. Refer to included "Frac-Out Plan" prepared by Northern Directional Drilling.

Character Limit: 10,000

Will part or all of this project be funded with one of the following CDFW-managed grants?

If you have received a grant other than those listed here, we do not need this information. Listed items are CDFW-managed grants, and others are not relevant to our tracking metrics. Select all that apply:

Water Right(s), Water Diversion(s), & Reservoir(s)

Does the project have an associated water right(s)?

Response:* No

Does the project include any water diversion(s)?

If the diversion of water is only incidental to the project described in the notification (e.g., temporarily dewatering a stream segment to install a culvert or bridge or drafting water as part of a timber harvesting operation) select "No". Response:* No

Diversion 1

Complete the water use below. For diversion rate, use gallons per day (gpd) if rate is less than 0.025 cubic foot per second (cfs) (approximately 16,000 gpd). California Code of Regulations Title 23, §659 et seq. defines beneficial uses of water and states that "the board will determine whether other uses of water are beneficial when considering individual applications to appropriate water". Season of Diversion:*

Beginning Date Ending Date

Diversion Rate (cfs or gpm):*

Unit of Measure*

Specify the maximum instantaneous rate of withdrawal (using proposed equipment) that will be achieved at any time during the season of diversion. Measured in cubic feet per second (cfs) or gallons per minute (gpm). Maximum Instantaneous Rate:

Unit of Measure*

Approximate lowest level of flow in the river, stream, or lake at the point of diversion during the proposed season of diversion in gpm or cfs. Lowest Level Flow:

Unit of Measure*

Diversion 2

Complete the water use below. For diversion rate, use gallons per day (gpd) if rate is less than 0.025 cubic foot per second (cfs) (approximately 16,000 gpd). California Code of Regulations Title 23, §659 et seq. defines beneficial uses of water and states that "the board will determine whether other uses of water are beneficial when

Beginning Date Ending Date

considering individual applications to appropriate water".
Season of Diversion:*

Diversion Rate (cfs or gpm):*

Unit of Measure*

Specify the maximum instantaneous rate of withdrawal (using proposed equipment) that will be achieved at any time during the season of diversion. Measured in cubic feet per second (cfs) or gallons per minute (gpm).
Maximum Instantaneous Rate:

Unit of Measure*

Approximate lowest level of flow in the river, stream, or lake at the point of diversion during the proposed season of diversion in gpm or cfs.
Lowest Level Flow:

Unit of Measure*

Diversion 3

Complete the water use below. For diversion rate, use gallons per day (gpd) if rate is less than 0.025 cubic foot per second (cfs) (approximately 16,000 gpd). California Code of Regulations Title 23, §659 et seq. defines beneficial uses of water and states that "the board will determine whether other uses of water are beneficial when considering individual applications to appropriate water".
Season of Diversion:*

Beginning Date Ending Date

Diversion Rate (cfs or gpm):*

Unit of Measure*

Specify the maximum instantaneous rate of withdrawal (using proposed equipment) that will be achieved at any time during the season of diversion. Measured in cubic feet per second (cfs) or gallons per minute (gpm).
Maximum Instantaneous Rate:

Unit of Measure*

Approximate lowest level of flow in the river, stream, or lake at the point of diversion during the proposed season of diversion in gpm or cfs.
Lowest Level Flow:

Unit of Measure*

Diversion 4

Complete the water use below. For diversion rate, use gallons per day (gpd) if rate is less than 0.025 cubic foot per second (cfs) (approximately 16,000 gpd). California Code of Regulations Title 23, §659 et seq. defines beneficial uses of water and states that "the board will determine whether other uses of water are beneficial when considering individual applications to appropriate water".

Beginning Date Ending Date

Season of Diversion:*

Diversion Rate (cfs or gpm):*

Unit of Measure*

Specify the maximum instantaneous rate of withdrawal (using proposed equipment) that will be achieved at any time during the season of diversion. Measured in cubic feet per second (cfs) or gallons per minute (gpm). Maximum Instantaneous Rate:

Unit of Measure*

Approximate lowest level of flow in the river, stream, or lake at the point of diversion during the proposed season of diversion in gpm or cfs. Lowest Level Flow:

Unit of Measure*

Diversion 5

Complete the water use below. For diversion rate, use gallons per day (gpd) if rate is less than 0.025 cubic foot per second (cfs) (approximately 16,000 gpd). California Code of Regulations Title 23, §659 et seq. defines beneficial uses of water and states that "the board will determine whether other uses of water are beneficial when considering individual applications to appropriate water".
Season of Diversion:*

Beginning Date Ending Date

Diversion Rate (cfs or gpm):*

Unit of Measure*

Specify the maximum instantaneous rate of withdrawal (using proposed equipment) that will be achieved at any time during the season of diversion. Measured in cubic feet per second (cfs) or gallons per minute (gpm). Maximum Instantaneous Rate:

Unit of Measure*

Approximate lowest level of flow in the river, stream, or lake at the point of diversion during the proposed season of diversion in gpm or cfs. Lowest Level Flow:

Unit of Measure*

Does the project include a reservoir(s)?

Complete this section if the project includes the construction of a reservoir or pond, whether permanent or temporary, and/or the routine operation of an existing reservoir or pond by diverting or obstructing the flow of a river or stream. Response:*

No

Commercial Cannabis Cultivation

Does any part of the project include remediation at a cannabis cultivation site?

Includes projects that were from past cannabis grows even if you will not be

No

cultivating cannabis in the future.
Response:*

Are you seeking documentation to submit to the Department of Cannabis Control (DCC) for the purpose of commercial cannabis cultivation licensing?

If you are applying for, or have received, a commercial cannabis license from the Department of Cannabis Control (DCC), select yes.
Response:*

No

The Premises is the designated structure(s) and land specified in the DCC application that are in possession of and used by the applicant or licensee to conduct the commercial cannabis activity. There may be multiple APNs associated with the premises. Include ALL APNs associated with your DCC application (if applicable) in this section. Unsure of your property APN? Click here to search by location or address.

Premises APN | Premises APN | Premises APN

County	Tax APN format
Alameda	No Standard Format
Alpine	123-456-789
Amador	123-456-789
Butte	123-456-789
Calaveras	123-456-789-000 (Always ends in "000")
Colusa	123-456-789-000 (Always ends in "000")
Contra Costa	123-456-789-0
Del Norte	123-456-789-000 (Always ends in "000")
El Dorado	123-456-789-000 (Always ends in "000")
Fresno	123-456-78
Glenn	123-456-789-000 (Always ends in "000")
Humboldt	123-456-789-000 (Always ends in "000")
Imperial	123-456-789-000 (Always ends in "000")
Inyo	123-456-789-00 (Ends "00" or "02" or "03")
Kern	123-456-78-00-1
Kings	123-456-789-000 (Always ends in "000")
Lake	123-456-789-000 (Always ends in "000")
Lassen	123-456-78-11
Los Angeles	1234-567-891
Madera	123-456-789-000 (Always ends in "000")
Marin	123-456-78
Mariposa	123-456-7890
Mendocino	123-456-78-01
Merced	123-456-789-000 (Always ends in "000")
Modoc	123-456-789-000 (Always ends in "000")
Mono	123-456-789-

	000 (Always ends in "000")
Monterey	123-456-789-000 (Always ends in "000")
Napa	123-456-789-000 (Always ends in "000")
Nevada	123-456-789-000 (Always ends in "000")
Orange	123-456-78
Placer	123-456-789-000 (Always ends in "000")
Plumas	123-456-789-000 (Always ends in "000")
Riverside	123-456-789
Sacramento	123-4567-891-0000 (Always ends in "0000")
San Benito	123-456-789-000 (Always ends in "000")
San Bernardino	1234-567-89-0000 (Always ends in "0000")
San Diego	123-456-78-00 (Always ends in "00")
San Francisco	1234-567
San Joaquin	123-456-789-000 (Always ends in "000")
San Luis Obispo	123-456-789
San Mateo	123-456-789
Santa Barbara	123-456-789
Santa Clara	123-45-678
Santa Cruz	123-456-78
Shasta	123-456-789-000 (Always ends in "000")
Sierra	123-456-789-0
Siskiyou	123-456-789-000 (Always ends in "000")
Solano	1234-567-891
Sonoma	123-456-789-000 (Always ends in "000")
Stanislaus	123-456-789-000 (Always ends in "000")
Sutter	12-345-678
Tehama	123-456-789-000 (Always ends in "000")
Trinity	123-456-789-000 (Always ends in "000")
Tulare	123-456-789-000 (Always ends in "000")
Tuolumne	123-456-789-000 (Always ends in "000")
Ventura	123-4-567-891
Yolo	123-456-789-000 (Always ends in "000")
Yuba	123-456-789-000 (Always ends in "000")

Premises APNs:*

Premises APN Premises APN Premises APN

Premises APN Premises APN Premises APN

Access Google Maps Help to find your GPS latitude or longitude coordinates. GPS Coordinates:	Latitude Minimum Requirement ##.#####	Longitude Minimum Requirement -###.#####
Access Google Maps Help to find your GPS latitude or longitude coordinates. GPS Coordinates:	Latitude Minimum Requirement ##.#####	Longitude Minimum Requirement -###.#####
Access Google Maps Help to find your GPS latitude or longitude coordinates. GPS Coordinates:	Latitude Minimum Requirement ##.#####	Longitude Minimum Requirement -###.#####
Access Google Maps Help to find your GPS latitude or longitude coordinates. GPS Coordinates:	Latitude Minimum Requirement ##.#####	Longitude Minimum Requirement -###.#####
Access Google Maps Help to find your GPS latitude or longitude coordinates. GPS Coordinates:	Latitude Minimum Requirement ##.#####	Longitude Minimum Requirement -###.#####

Agreement Term

Agreement Term Requested:* Regular Term (5 years or less)

Project Term

Specify both the year the project activities will begin and the year the project activities will end. Be advised CDFW may restrict work within a stream or lake to the dry season of the year. Consequently, you may want to include more than one season of possible operation in your project proposal.

Beginning Year:* 2022
YYYY

Ending Year:* 2023
YYYY

Seasonal Work Period

Specify the time period you intend to work on the project (e.g., August 1 to October 15). If the work period will exceed one year, specify the work period for each year of the project (e.g., Work Period 1, February 10 to March 31; Work Period 2, August 1 to October 15; Work Period 3, February 10 to March 31; etc.). CDFW may restrict project work to certain periods depending on rainfall, fish migration, wildlife breeding or nesting season, or other resource concerns. Specify the estimated number of days of actual work days for each seasonal work period.

NOTE: If your project has more that five seasonal work periods, include document identifying the additional work periods in the Documents and Maps form.

	Beginning Date	Ending Date	Number of Work Days
Work Period #1:*	07/01/2022	10/15/2022	106
Work Period #2:	06/01/2023	10/15/2023	136
Work Period #3:			
Work Period #4:			
Work Period #5:			

Project Impacts

Impacts to River, Stream, or Lake

Describe any foreseeable impacts (permanent or temporary) to the flow, bed, channel and bank of the river, stream, or lake.

Quantify the effects and impacts in the project vicinity by noting the type, volume, and dimensions of material displaced through grading, trenching or other forms of site alteration. Also include any foreseeable impacts (permanent or temporary) to the riparian zone on or adjacent to the bank of the river, stream or lake.

The riparian zone is the area that surrounds a channel or lake and supports (or can support) vegetation that is dependent on surface or subsurface water. Include the effects of your project activity to this zone at least to the outer (landward) edge of the drip line of any dependent vegetation.

Describe Impacts:*

No direct impacts are anticipated. A minimum of 25 feet distance will be maintained from the bottom of Huichica Creek to the top of the pipeline. The excavation of the bore puts will be at least 250 feet from the centerline of the creek and outside the riparian habitat. The entrance bore hole will be located in an existing cow pasture on the east side of the creek and the exit hole will be located in an existing vineyard block on the west side. No trees will be removed, there will be no impacts to riparian canopy or habitat, and there will be no direct impact to the bed or banks of the creek. The only potential impact would be in the unlikely event of a frac-out, but per the enclosed Frac-Out Avoidance and Minimization Plan, every minimization measure and best management practice has been incorporated to virtually eliminate this risk.

Character Limit: 10,000

Impacts to Special Status Species

Will there be any foreseeable impacts to any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

A special status species is an animal or plant species that meets any of the following criteria:

- **The species is listed or proposed for listing under the State or federal Endangered Species Act.**
- **The species is designated as rare under the State Native Plant Protection Act.**
- **The species is identified as a candidate, sensitive, or special status species in a local, regional, State or federal list, plan, or policy.**
- **The species otherwise meets the definition of an endangered, rare, or threatened species under California Environmental Quality Act (CEQA) Guidelines section 15380 (Cal. Code Regs., tit. 14, § 15380).**

Special Status Species?*

No

Identify the source(s) of information (e.g., biological surveys, BIOS, environmental documents, etc.) that supports a "Yes" or "No" answer for the

WRA Biological Report dated July 11, 2022

Character Limit: 5,000

previous question. Provide web-link to document or attach the document in the Documents and Maps form. Source(s):*

Impacts to Trees and Vegetation

Will the project affect any trees or vegetation?

Response:* No

Identify the type(s) of tree(s) or vegetation (i.e., trees such as oak, willow, or sycamore, and plant communities, such as salt marsh, freshwater marsh, wet meadow, willow thicket, riparian woodland, willow riparian woodland, desert wash woodland, riparian forest, oak riparian forest, redwood forest, riparian scrub, desert wash scrub, alkali sink scrub, oasis, vernal pool, bog, non-native, or ornamental) that will affected by the project. Include temporary and permanent impacts with linear feet and total acres.

No direct impacts are anticipated. A minimum of 25 feet distance will be maintained from the bottom of Huichica Creek to the top of the pipeline. The excavation of the bore puts will be at least 250 feet from the centerline of the creek and outside the riparian habitat. The entrance bore hole will be located in an existing cow pasture on the east side of the creek and the exit hole will be located in an existing vineyard block on the west side. No trees will be removed, there will be no impacts to riparian canopy or habitat, and there will be no direct impact to the bed or banks of the creek. T

Character Limit: 5,000

If trees *greater than 2 inches in diameter at breast height* (dbh) and/or mature shrubs will be removed as part of the project, specify the estimated number and species (if available) to be removed, and the range of trunk diameters measured at breast height. Trees can be grouped into size classes (i.e., four oak trees approximately 10 to 20 inches dbh). Attach a tree survey, if available.

If no trees or vegetation is being affected by this project, attach aerial photo with date supporting this determination in the Documents and Maps form.

Describe:*

California Environmental Quality Act (CEQA)

Has a CEQA lead agency been determined?

Before identifying CDFW as the CEQA lead agency, please obtain approval from the CDFW regional office covering the project area. CEQA Lead Agency:*

No

If the project described in this notification is not the "whole project", or action pursuant to CEQA, briefly describe the entire project. If the project described in the notification is the entire project, insert the following statement in this box: "The project described in the notification is the entire project."

CDFW must comply with CEQA when issuing a final agreement for a project. CEQA defines a "project" as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" (Cal. Code Regs., tit. 14, § 15378). Briefly Describe the Entire Project:*

The project described in the notification is the entire project.

Character Limit: 5,000

National Environmental Policy Act (NEPA)

Has a draft or final document been prepared for the project pursuant to the National Environmental Policy Act (NEPA)?

Draft or Final Document:* No
If "Yes", attach a copy of the document in the Documents and Maps form.

Measures to Protect Fish, Wildlife, and Plant Resources

Describe the methods or techniques that will be used to prevent sediment from entering any watercourses during and after construction. If you are unsure of which methods or techniques to prevent erosion would best minimize impacts at the project site, indicate "unknown".

CDFW staff can assist in providing the appropriate measures. Attach any additional documents, if available, in the Documents and Maps form.

Sediment/Erosion Control:*

The entrance and exit boreholes are greater than 200 feet from the stream in existing developed, disturbed, or non-sensitive habitats. There are no impacts anticipated due to erosion due to the gentle slopes and time of year the work will occur.

Character Limit: 5,000

Describe any measures that will be incorporated into the project to avoid or minimize impacts to fish, wildlife, and plant resources. If you are unsure of which measures would best minimize impacts at the project site, indicate "unknown".

CDFW staff can assist in providing the appropriate measures. Attach any additional documents, if available, in the Documents and Maps form.

Avoidance/Minimization Measures:*

The primary measure has been avoidance of any and all riparian habitat during project design and siting. The entrance and exit boreholes will be 250 feet from the stream and will not impact any riparian habitat. The pipe will be a minimum of 25 feet below the creek bed.

Character Limit: 5,000

Describe all measures that will be incorporated into the project provide mitigation or compensation for impacts to fish, wildlife, and plant resources. If you are unsure of which measures would best provide mitigation or compensation for potential impacts at the project site, indicate "unknown."

CDFW staff can assist in providing the appropriate measures. Attach any additional documents, if available, in the Documents and Maps form.

Mitigation/Compensation Measures:*

No direct or indirect impacts are anticipated and therefore no mitigation measures are proposed. WRA has recommend preconstruction surveys for wildlife species, which will be incorporated into the project.

Character Limit: 5,000

Prior Notifications and/or Agreements

Prior Orders, Notice, and/or Violations

Local, State, and/or Federal Permits

Maps and Photos

Map/Photo		Date Uploaded
Project Site Map:*	Carneros Vista Pipe Drilling Areas.pdf	07/12/2022
Project Aerial View Map:*	Carneros Vista Pipe Drilling Areas.pdf	07/12/2022
Project Site Photo(s):*	Carneros Vista Looking West from Duhig Road.JPG	07/12/2022
Project Site Photo(s):		
Project Site Photo(s):		

Studies and Mapping

Has a biological study been completed for the project site?

Response:* Yes
If 'Yes', include a copy of the study in the Additional Documents and Maps section below.

Has one or more technical studies (e.g., engineering, hydrologic, geologic, or geomorphological) been completed for the project for project site?

Response:* Yes
If 'Yes', include a copy of the study in the Additional Documents and Maps section below.

Have fish or wildlife resources or waters of the state been mapped or delineated on the project site?

Response:* Yes
If 'Yes', include a copy of the resource mapping/delineation in the Additional Documents and Maps section below.

Additional Documents and Maps

#			Date Uploaded
1. Description:	Biological Report	Carneros Vista_Bio Letter_FINAL_20220711.pdf	07/12/2022
2. Description:	Frac-Out Avoidance and Minimization Plan	NDDI Frac-Out Plan_Carneros Vista Pipeline_Huichica Creek Napa.pdf	07/12/2022
3. Description:	Creek Pipe Undercrossing Profile	NDDI Profile_Creek Profile_8 HDPE.pdf	07/12/2022
4. Description:	Payment Receipt D-0036365749-3	Licenses-27553471.pdf	07/12/2022
5. Description:			
6. Description:			
7. Description:			
8. Description:			
9. Description:			
10. Description:			
11. Description:			
12. Description:			
13. Description:			
14. Description:			
15. Description:			
16. Description:			
17. Description:			
18. Description:			
19. Description:			
20. Description:			
21. Description:			
22. Description:			
23. Description:			
24. Description:			
25. Description:			

Regular Term Notification Fees

Select the Project Name previously entered in the Project Location and Category form. Project Name:	For the purposes of calculating the notification fee, "Project Cost Range" refers only to the project name identified above (i.e., subject to the notification requirements in Fish and Game Code section 1602), and not the overall project. Project Cost Range:	Project costs include, but are not limited to, the cost of all investigations, surveys, designs, labor, and materials required to complete the project. The project costs are intended to be primarily the costs associated with the construction and operation of actual project itself. These elements include labor, equipment, permanent materials, supplies, subcontracts (e.g., engineering surveys and investigations), overhead, and miscellaneous costs. An element not intended to be include the project cost are costs associated with other agency permits or licenses, mitigation, and CEQA or NEPA compliance. Actual Project Cost:	Project Fee:
Carneros Vista Ranch Directional Boring Pipeline	$100,000 to less than $200,000	$150,000.00	$3,558.50
			$3,558.50

Long Term Notification Fees

Select the Project Name previously entered in the Project Location and Category form. Project Name:	For the purposes of calculating the notification fee, "Project Cost Range" refers only to the project name identified above (i.e., subject to the notification requirements in Fish and Game Code section 1602), and not the overall project. Project Cost Range:	Project costs include, but are not limited to, the cost of all investigations, surveys, designs, labor, and materials required to complete the project. The project costs are intended to be primarily the costs associated with the construction and operation of actual project itself. These elements include labor, equipment, permanent materials, supplies, subcontracts (e.g., engineering surveys and investigations), overhead, and miscellaneous costs. An element not intended to be include the project cost are costs associated with other agency permits or licenses, mitigation, and CEQA or NEPA compliance. Actual Project Cost:	Project Fee:
			$0.00

Remediation Fees

Select the Project Name previously entered in the Project Location and Category form. Project Name:	Select the total remediated area associated with the Project Name identified above. Remediation Area:	Project Fee:
		$0.00

Total Fees Due

Regular Term Agreement Fees:	$3,558.50
Long Term Agreement Fees:	$0.00
Remediation Fees:	$0.00
TOTAL (All Fees):	$3,558.50

Payment Information

Payment Information 1	
Payment Method:*	Credit Card
Document #:*	D-0036365749-3
Name of the Bank/Institution:*	
Check/Money Order #:*	

Site Inspection

In the event CDFW determines that a site inspection is necessary, I hereby authorize a CDFW representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant CDFW such entry.

CDFW Personnel Authorized to Enter Property:

I request CDFW to first contact the person identified below to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay CDFW's determination as to whether a Lake or Streambed Alteration Agreement is required and/or CDFW's issuance of a draft agreement pursuant to this notification.

First Contact this Person to Schedule Site Visit: Yes

Method of Contact:* Email
Select all that apply

Contact Name:* Annalee (First Name) Sanborn (Last Name)

Title/Position:

Phone Number:* 707-253-1806

Email:* asanborn@ppiengineering.com

Electronic Signature

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant.

I Certify:* Yes

I understand that if any information in this notification is found to be untrue or incorrect, CDFW may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification.

I Understand:* Yes

I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution.

I Understand:* Yes

I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless CDFW has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

I Understand:* Yes

Electronic Signature:* Harinder Dhaliwal
First and Last Name

Date:* 07/12/2022

Documents from CDFW

Documents to CDFW

July 11, 2022

Annalee Sanborn
ASanborn@ppiengineering.com – *Sent via email*

Re: Biological Report for 2155 Duhig Road, Napa County, California (APN: 047-271-002)

Ms. Sanborn:

This letter provides a biological evaluation for a portion of the Carneros Vista property at 2155 Duhig Road (Study Area) in unincorporated Napa County, California (Figure A-1; Attachment A). The purpose of this assessment is to provide technical biological resources information in support of an application to construct a subterranean recycled water pipeline under Huichica Creek by methods of horizontal directional drilling. This report evaluates the potential for the Study Area to support special-status species, sensitive vegetation communities, and aquatic features, and the potential for impacts to these biological resources as a result of the project. Both a desktop review and site visits were used for this analysis.

The Study Area is approximately 13.4 acres in size and located within a greater approximately 224-acre parcel (APN 047-271-002). For the purpose of this assessment, the Study Area is restricted to a stretch of Huichica Creek within the property and, largely, undeveloped areas on either side of such. The surrounding landscape is largely developed in vineyards, roads, and rural residences. The directional drilling will consist of excavating two pits and drilling beneath Huichica Creek between these pits. The pits will be located a minimum of 200 feet from Huichica Creek (approximately 250 feet from the creek centerline), and will range in dimension between 100 to 900 square feet. Best management practices that have been incorporated into the project plans include:

- A minimum of 25 feet cover will be maintained between the drilling and the bottom of the creekbed.
- Only nonhazardous drilling mud additives will be utilized and will be subject to review and approval by regulatory agencies including California Department of Fish and Wildlife (CDFW).
- At the request of CDFW, a frac-out avoidance and minimization plan has been prepared and will be implemented.

METHODS

On April 28 and June 16, 2022, WRA plant and wildlife biologists visited the Study Area to map land cover types, document plant and wildlife species present, and evaluate on-site habitat for the potential to support special-status species. Prior to the site visit, the WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive biological communities (e.g., wetlands) and special-status species (e.g., endangered plants), including:

- Soil Survey of Napa County (USDA 1978, USDA 2022)
- Cuttings Wharf 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2012)
- Contemporary aerial photographs (Google Earth 2022)

- Historical aerial photographs (NETR 2022)
- National Wetlands Inventory (USFWS 2022)
- CNDDB (CDFW 2022a)
- CNPS Inventory (CNPS 2022a)
- Consortium of California Herbaria (CCH1, CCH2 2022)
- A Manual of California Vegetation, Online Edition (CNPS 2022b)
- Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)
- California Natural Community List (CDFW 2022b)

Database searches (i.e., CNDDB, CNPS) for special-status species focused on the Sonoma, Napa, Mt. George, Sears Point, Cuttings Wharf, Cordelia, Petaluma Point, Mare Island, and Benicia USGS 7.5-minute quadrangles.

Following the remote assessment, the WRA biologists completed a field review over the course of two dates (see above) to document: (1) land cover types (e.g., terrestrial communities, aquatic resources), (2) existing conditions and to determine if such provided suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic natural communities (e.g., wetlands) were present, and (4) if special-status species were present. The Study Area was reviewed for the presence of aquatic resources containing an ordinary high water mark (OHWM) and top of bank. Methods relied on the A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar 2008) and Corps of Engineers Regulatory Guidance Letter 05-05 (Corps 2005). OHWM was delineated using topographical indicators as well as destruction of native terrestrial vegetation, shelving, and the presence of litter and debris. Top of bank is identified in the field by indicators such as benching and changes in vegetation.

REGULATORY SETTING

The following natural resources are protected under one or more federal, state and/or local (County) regulations, or are otherwise considered sensitive under the California Environmental Quality Act (CEQA). They are addressed in subsequent sections of the report as relevant.

Federal and State –Land Cover Types

Waters of the U.S.: protected under the Clean Water Act (CWA), administered by the Environmental Protection Agency and U.S. Army Corps of Engineers (Corps):

- Includes wetlands, streams, rivers, and other aquatic habitats meeting the guidance issued by the Corps
- Projects that would impact such features would require a Section 404 permit from the Corps

Waters of the State: protected under the Porter-Cologne Act, administered by the Regional Water Quality Control Board (RWQCB):

- Includes surface water or groundwater, including saline waters, within the boundaries of the state, and are generally delineated following the guidance issued by the Corps

- Projects that would impact such features would require Waste Discharge Requirements issued by the RWQCB

Streams, Lakes, and Riparian Habitat: protected under the California Fish and Game Code (CFGC), administered by the California Department of Fish and Wildlife (CDFW):

- Includes creeks and rivers (bodies where water flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life), and vegetation adjacent to associated with such (riparian habitat)
- Projects that would impact such features would require a Lake and Streambed Alteration Agreement with the CDFW

Sensitive Natural Communities: include land cover types that fulfill special functions or have special values and must be considered and evaluated under CEQA (CCR Title 14, Div. 6, Chap. 3, Appendix G):

- Vegetation communities ranked as "threatened" or "very threatened" by CDFW (2022b)
- Vegetation alliances ranked globally (G) or statewide (S) as 1 through 3 in the CNDDB based on NatureServe's (2020) methodology
- Sensitive natural communities identified in local or regional plans, policies, or regulations (e.g., see canopy retention requirements below)

Wildlife Movement Corridors: Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

Federal and State – Special-Status Species

Listed Plant and Wildlife Species including Critical Habitat: protected under one or more of the Federal Endangered Species Act (ESA), California Endangered Species Act (CESA), CFGC, and/or California Native Plant Protection Act (CNPPA) administered by the U.S. Fish and Wildlife Service (USFWS), and/or CDFW:

- Includes plants listed under the ESA, CESA, and/or CNPPA
- Includes wildlife listed under the ESA and/or CESA
- Projects that would impact such species require consultation with the USFWS and/or CDFW
- Projects conducted by, funded by, or permitted by the federal government in designated critical habitat (for federal listed species) require consultation with USFWS

Other Special-status Plant and Wildlife Species: considered for protection through CEQA:

- Includes plants ranked 1, 2, or 3 on the California Native Plant Society's (CNPS) inventory[1]
- Includes Species of Special Concern (SSC) listed by CDFW, and wildlife listed as Fully Protected Species by the CFGC

[1] *Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare; this is applicable to some Rank 4 plants in Napa County.*

- Bat species assigned a “High” or “Medium-high” conservation priority ranking by the Western Bat Working Group (WBWG; 2022)
- Projects subject to CEQA would be analyzed to determine if impacts to such species are potentially “significant”

Nesting Birds: baseline protections provided under the federal Migratory Bird Treaty Act (MBTA) and CFGC:

- Includes the nest, eggs, young, and adults of most native species (MBTA, CFGC) and some non-native species (CFGC; i.e., sections 3503, 3503.5 and 3513)
- Projects that would impact breeding birds would require avoidance (typically setbacks) to allow the birds to complete their reproductive life cycle

Napa County Regulations

The Study Area is within unincorporated Napa County and is subject to the Napa County General Plan (Napa County 2008). Conditions in the General Plan relevant to the Study Area and proposed project include species of local concern (named “Locally Rare”), stream and wetland protections, forest/woodland canopy retention, and wildlife corridors (as defined above).

Stream and Wetland Setbacks: Napa County Code (NCC) 18.108.025 requires stream and wetland setbacks for new land clearings:

- “Stream” is defined by NCC (18.108.030) as: (1) a watercourse designated as a “blue-line” stream by the U.S. Geological Survey; (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, riparian and/or woody-vegetation; or (3) those watercourses listed in Resolution No. 94-19
- Specified stream setbacks correspond to slope, and range from 35 feet (< 1 percent slope) to 150 feet (60-70 percent slope)
- A minimum 35-foot setback is required for ephemeral or intermittent streams not meeting Napa County’s criteria for a stream
- A minimum 50-foot setback is required from the delineated edge of a wetland boundary

Vegetative Canopy Protection: The Water Quality and Tree Protection Ordinance (WQTPO; 2019) modified NCC 18.108 to strengthen existing protections for woodland/forest canopy:

- A minimum of 70 percent canopy retention (of native trees) is required in sensitive domestic water supply drainages, based on vegetation that existed within the parcel in 1993
- In Agricultural Watershed zoning districts, 70 percent canopy retention is required based on vegetation that existed within the parcel in June 2016
- Additionally in Agricultural Watershed zoning districts, trees within oak woodland and coniferous forest land covers must be preserved or otherwise mitigated for at a minimum 3:1 ratio (as measured in acreage)

RESULTS

Land Cover Types

During the site visit, WRA Inc. (WRA) evaluated the species composition and area occupied by distinct land vegetation communities, aquatic resources, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. Vegetation communities are characterized and mapped based on distinct shifts in plant assemblage (vegetation) and follow the California Natural Community List (CDFW 2022) and A Manual of California Vegetation, Online Edition (CNPS 2022). These resources cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists.

As shown in Figure A-2 (Attachment A), WRA observed six land cover types within the Study Area. The non-sensitive land cover types in the Study Area include developed, non-native grasslands, and non-native tree groves, while the sensitive communities include red willow thicket (riparian), seasonal wetland, and perennial stream (Huichica Creek). The photo appendix attached to this document shows representative site photographs within the Study Area.

Table 1. Land Cover Types within the Study Area

Land Cover Type	Area Within Study Area	Area Within Project Area
Sensitive		
Red Willow Thicket	1.4 acres	N/A
Seasonal Wetland	0.1 acre	N/A
Perennial Stream	0.4 acre*	N/A
Subtotal		
Non-Sensitive		
Developed	4.6 acres	100–900 square feet
Non-native Grassland	6.7 acres	100–900 square feet
Blue Gum Grove	0.6 acre	N/A
Subtotal		
Total Study Area Acreage		

**Acreage excluded from land cover totals in Figure A-2; acreage here expresses the OHWM*

Terrestrial Land Cover Types

Developed Area (no vegetation alliance). CDFW Rank: None: Within the Study Area, developed portions are composed of vineyards, a gravel access road, portions of Duhig and Ramal roads, parking areas, a vineyard building, and associated infrastructure. The vegetation is highly altered, consisting of overhanging trees and disturbance tolerant herbs. Species include blue gum (*Eucalyptus globulus*), black lotus (*Robinia pseudoacacia*), red willow (*Salix laevigata*), Oregon ash (*Fraxinus latifolia*), purple star thistle (*Centaurea calcitrapa*), rough cat's-ear (*Hypochaeris radicata*), field burweed (*Soliva sessilis*), and red sandspurry (*Spergularia rubra*). The Study Area contains 4.6 acres, while the Project Area contains an estimated 100 to 900 square feet. This community is synonymous with the Urban/Built-up biotic community in the NCLC (Thorne et al. 2004). This community is not considered sensitive by Napa County, CDFW, or any other regulatory entity.

Non-native Grassland – Wild Oat Grassland (*Avena barbata* Semi-Natural Herbaceous Stands). CDFW Rank: None: Non-native grasslands occur throughout cismontane California, particularly in the Sierra

Foothills, Coast Range, Transverse Range, and Peninsular Ranges (Sawyer et al. 2009, CNPS 2022b). The Study Area contains 6.7 acres of which an estimated 100 to 900 square feet is situated in the Project Area. The non-native grasslands on the eastern side of Huichica Creek is a fenced-in pasture used for cattle grazing. Dominant species include wild oat (*Avena barbata*), soft chess (*Bromus hordeaceus*), Italian rye grass (*Festuca perennis*), mouse barley (*Hordeum murinum*), Italian thistle (*Carduus pycnocephalus*), chicory (*Cichorium intybus*), and milk thistle (*Silybum marianum*). This community is synonymous with the California Annual Grasslands Alliance biotic community in the NCLC (Thorne et al. 2004). These grasslands provide habitat for numerous common native plants and wildlife, as well as have the potential to support several special-status species associated with grasslands. These grasslands are not considered sensitive by the CDFW or Napa County.

Blue Gum Grove (*Eucalyptus globulus* Woodland Semi-Natural Woodland Stands). CDFW Rank: None: Blue Gum groves are known from the Coast Ranges and Central Valley, typically as planted woodlands and shelterbelts to buffer coastal winds, provide shade, and as woodlots for firewood (Sawyer et al. 2009, CNPS 2022b). The Study Area contains 0.6 acre of blue gums, none of which are situated in the Project Area. The overstory of this alliance is entirely composed of either blue gum (*Eucalyptus globulus*), an invasive species listed as "limited" by the California Invasive Plant Council (Cal-IPC 2022). The understory is low-growing and relatively bare, and composed of non-native, weedy species such as ripgut brome (*Bromus diandrus*) and wild oat (*Avena barbata*). This community is synonymous with the Eucalyptus Alliance biotic community in the NCLC (Thorne et al. 2004). These groves provide habitat for numerous common wildlife, as well as have the potential to support several special-status bird and bat species associated with wooded areas. Neither the CDFW nor Napa County consider these groves to be sensitive natural communities.

Aquatic Resources

Seasonal Wetland – Italian Rye Grass Grassland (*Festuca perennis* Herbaceous Alliance). Section 404/401 CWA; CDFW Rank: None: Seasonal wetlands are known from a variety of topographic positions and soil types where surface waters collect and flows are reduced, or subsurface waters approach the soil surface as a rising water table or seep. In the Study Area, seasonal wetlands occupy 0.1 acre; these wetlands are situated entirely outside of the Project Area. The vegetation is dominated by hydrophytes including Italian rye grass (*Festuca perennis*), Mediterranean barley (*Hordeum marinum*), annual semaphore grass (*Pleuropogon californicus* spp. *californicus*), rabbit's-foot grass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), and stalked popcornflower (*Plagiobothrys stipitatus* var. *micranthus*). Indicators of wetland hydrology include direct observation of inundation and saturation, flow patterns, sediment deposition, and algal mats. The soils were saturated, and in deeper portions of the swale inundated, during the April site visits, and are assumed hydric given the presence of strong vegetation and wetland hydrology indicators. Because all three wetland parameters (vegetation, soil, and hydrology) are clearly evidenced, those areas mapped as wetland in the Study Area would be considered sensitive by Napa County and jurisdictional under the CWA.

Red Willow Thicket (*Salix laevigata* Woodland Alliance). CFGC Section 1600. CDFW Rank: G3 S3. Red willow thickets are known from the Central Valley, Bay Area, Central and South Coast Ranges, Peninsular Ranges, and Transverse Range, from Shasta County south to San Diego County (Sawyer et al. 2009, CNPS 2022a). The Study Area contains 1.4 acres of red willow thicket; it is situated entirely outside of the Project Area. The canopy is continuous and dominated by red willow (*Salix laevigata*), with substantial arroyo willow (*Salix lasiolepis*), Oregon ash (*Fraxinus latifolia*), and valley oak (*Quercus lobata*). The understory is composed of a mix of shrubs and herbs common in a riparian position, such as Himalaya blackberry (*Rubus*

armeniacus), blue elderberry (*Sambucus nigra*), poison hemlock (*Conium maculatum*), and Santa Barbara sedge (*Carex barbarae*). This community is synonymous with the Mixed Willow Super Alliance biotic community in the NCLC (Thorne et al. 2004). These woodlands provide habitat for numerous common native plants and wildlife, as well as have the potential to support several special-status species associated with riparian thickets. The CDFW considers red willow thicket a sensitive natural community.

Perennial Stream (vegetation: *see Red Willow Thicket*). Section 404/401 CWA, Section 1602 CFGC, CDFW Rank: Sensitive: Streams include areas which carry natural sources of hydrology for a sufficient duration to prevent vegetation growth. Huichica Creek forms the basis of the Study Area and is considered as part of the project. It flows from north to south for approximately 900 feet in the Study Area, and another approximately 2,000 feet on the property, then passing under Duhig Road through a box culvert, continuing onward for approximately 1.9 river miles where it enters Hudeman Slough and the San Pablo Bay marshlands. Flows are perennial, the bank is composed of fine sediments, and supports a riparian canopy of red willow (*Salix laevigata*) and other trees. Huichica Creek is mapped on the Cuttings Wharf 7.5-minute quadrangle (USGS 2012), as well as being mapped in the California Aquatic Resources Inventory (CARI; SFEI 2022) and the National Wetlands Inventory (NWI; USFWS 2022). This stream is likely jurisdictional under Section 404/401 of the CWA and Section 1602 of the CFGC, and evidently meets the stream definition under Napa County Code 18.108.030

Special-status Species

Special-status Plants

Based upon a review of the resource databases (CNPS and CNNDB), a total of 65 special-status plant species have been documented within the nine USGS 7.5-minute quadrangles (Attachment C). Forty-five of these 65 species were considered unlikely or have no potential to occur in the Study Area for one or more of the following reasons:

- Edaphic (soil) conditions (e.g., serpentine, volcanic parent material) necessary to support the special-status plant species are not present in the Study Area;
- Topographic conditions (e.g., north-facing slope, montane, elevations, rock outcrops) necessary to support the special-status plant species are not present in the Study Area;
- Associated natural communities (e.g., chaparral, broadleaved upland forest, coastal dunes) necessary to support the special-status plant species are not present in the Study Area;
- The Study Area is geographically isolated from the documented range of the special-status plant species; or
- Recent evaluation of historical records has determined that these species are extirpated from the Study Area region.

The entirety of the Study Area was surveyed for the presence of special-status plant species during both site visits, which were timed to occur during respective blooming periods for species with the potential to occur on-site. No special-status plant species were observed during either survey and such are considered absent at the site. The twenty species with the potential to occur, but are not present are listed below:

- Henderson's bentgrass (*Agrostis hendersonii*); CRPR 3
- Alkali milk-vetch (*Astragalus tener* var. *tener*); CRPR 1B
- Sonoma sunshine (*Blennosperma bakeri*); FE, SE, CRPR 1B

- Johnny-nip (*Castilleja ambigua* ssp. *ambigua*); CRPR 4
- Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*); CRPR 1B
- Pappose tarplant (*Centromadia parryi* ssp. *parryi*); CRPR 1B
- Parry's rough tarplant (*Centromadia parryi* ssp. *rudis*); CRPR 4
- Bolander's water hemlock (*Cicuta maculata* var. *bolanderi*); CRPR 2B
- Dwarf downingia (*Downingia pusilla*); CRPR 2B
- Small spikerush (*Eleocharis parvula*); CRPR 4
- Jepson's coyote thistle (*Eryngium jepsonii*); CRPR 1B
- San Joaquin spearscale (*Extriplex joaquiniana*); CRPR 1B
- Hayfield tarplant (*Hemizonia congesta* ssp. *congesta*); CRPR 1B
- Contra Costa goldfields (*Lasthenia conjugens*); FE, CRPR 1B
- Legenere (*Legenere limosa*); CRPR 1B
- Lobb's buttercup (*Ranunculus lobbii*); CRPR 4
- California beaked-rush (*Rhynchospora californica*); CRPR 1B
- Long-styled sand-spurry (*Spergularia macrotheca* var. *longistyla*); CRPR 1B
- Showy Rancheria clover (*Trifolium amoenum*); FE, CRPR 1B
- Saline clover (*Trifolium hydrophilum*); CRPR 1B

Special-status Wildlife

A total of 60 special-status wildlife species have been documented in Napa County (CDFW 2022a, Napa County 2005). Twenty of these species have a moderate to high potential to occur in the Study Area. The remaining 40 species are unlikely or have no potential to occur due to one or more of the following reasons:

- Aquatic habitats (e.g., coastal salt marsh, estuaries) necessary to support the special-status wildlife species are not present in the Study Area
- Vegetation habitats (e.g., coast redwood forest, chaparral) that provide nesting and/or foraging resources necessary support the special-status wildlife species are not present in the Study Area
- Physical structures and vegetation (e.g., mines, old-growth coniferous trees) necessary to provide nesting, cover, and/or foraging habitat to support the special-status wildlife species are not present in the Study Area
- Host plants (e.g., dog violet, harlequin lotus) necessary to provide larval and nectar resources for the special-status wildlife species are not present in the Study Area
- The Study Area is outside (e.g., north of, west of) of the special-status wildlife species documented nesting range

Two special-status wildlife species, Swainson's hawk (*Buteo swainsoni*) and western pond turtle (*Emys marmorata*) were observed during the site visits. No substantial tree cavities/hollows with the potential to support roosting by special-status bats were observed within the Project Area. All 20 species with the potential to occur are listed below, and discussed in the Recommendation Section below.

- Tricolored blackbird (*Agelaius tricolor*); SC(E), SSC
- Grasshopper sparrow (*Ammodramus savannarum*); SSC, LR
- Great egret (*Ardea alba*); rookeries/nesting sites protected
- Great blue heron (*Ardea herodias*); rookeries/nesting sites protected
- Short-eared owl (*Asio flammeus*); SSC

- Long-eared owl (*Asio otus*); SSC
- Burrowing owl (*Athene cunicularia*); SSC
- Swainson's hawk (*Buteo swainsoni*); ST
- Northern harrier (*Circus hudsonius*); SSC
- Snowy egret (*Egretta thula*); rookeries/nesting sites protected
- White-tailed kite (*Elanus leucurus*); SFP
- San Francisco common yellowthroat (*Geothlypis trichas sinuosa*); SSC
- Yellow-breasted chat (*Icteria virens*); SSC, LR
- Loggerhead shrike (*Lanius ludovicianus*); SSC, LR
- Brewster's yellow warbler (*Setophaga petechia brewsteri*); SSC
- Western pond turtle (*Emys marmorata*)
- California red-legged frog (*Rana draytonii*); FT, SSC
- Steelhead (*Oncorhynchus mykiss irideus*); FT
- Vernal pool fairy shrimp (*Branchinecta lynchi*); FT
- California freshwater shrimp (*Syncaris pacifica*); FE, SE

Wildlife Corridors

To account for potential impacts to wildlife movement/migratory corridors, WRA reviewed the Essential Connectivity Areas dataset (in BIOS; CDFW 2022b). Additionally, aerial imagery (Google Earth 2022) for the local area was referenced to assess if local core habitat areas were present within or connected to the Study Area. This assessment was refined based on observations of on-site physical and/or biological conditions, including potential barriers to connectivity.

The Study Area is not within a wildlife corridor as mapped by CDFW (2022b). The Study Area and its greater parcel are situated within a much larger tract of vineyards and rural residences. While common wildlife species presumably utilize the site for movement at a local scale, the Study Area itself does not provide any corridor functions beyond connecting similar land parcels in surrounding areas. No potentially significant impacts to wildlife corridors or movement are anticipated as a result of the project, which will result entirely in underground infrastructure upon completion. Huichica Creek is designated Critical Habitat for steelhead (*Oncorhynchus mykiss irideus*).

RECOMMENDATIONS

Land Covers within the Study Area overlain with the proposed Project Area (limits of disturbance) are shown in Figure A-2 (Attachment A). Recommendations for the proposed project to avoid or otherwise minimize any potential impacts to sensitive biological resources are provided below.

Land Cover

The project is entirely located with the non-sensitive habitats of developed areas and non-native grasslands. No trees or large shrubs will be removed as part of the project. The Project Area is setback from Huichica Creek and the on-site seasonal wetlands by 225 feet or greater (a minimum of 250 feet from the centerline of Huichica Creek). The project will be conducted in the dry season thereby preventing the possibility of erosion or sediment migration. Therefore, there are no significant impacts to sensitive land cover types and no further considerations for such.

Special-status Species

Special-status Plants

A botanical survey of the Study Area was performed during respective blooming periods of special-status plant species with the potential to occur within the Study Area, and no special-status species were observed. As such, no recommendations for these species are warranted.

Special-status Birds and Non-status Nesting Birds

There are 15 special-status birds with the potential to occur within the Study Area, as well as non-status bird species with baseline protections. The project footprint is very small and will not incur a significant temporary or permanent impact to bird foraging habitat. No trees or shrubs will be removed as part of the project; therefore, nesting structures for the vast majority of bird species will not be affected. Any vegetation removal and/or use of heavy equipment within the Project Area should be performed from September 1 to January 31, outside of the general nesting bird season. If the vegetation removal or heavy equipment use during this time is not feasible, a pre-construction nesting bird survey should be performed by a qualified biologist no more than 7 days prior to the initiation of tree removal or ground disturbance is recommended. The survey should cover the Project Area and surrounding areas. If active bird nests are found during the survey, an appropriate no-disturbance buffer should be established by the qualified biologist. Once it is determined that the young have fledged (left the nest) or the nest otherwise becomes inactive (e.g., due to predation), the buffer may be lifted and work may be initiated within the buffer.

Special-status Aquatic Wildlife

There are five special-status wildlife species associated with aquatic habitats have the potential to occur within the Study Area, one of which, western pond turtle (*Emys marmorata*), was observed basking within Huichica Creek. Vernal pool fairy shrimp (*Branchinecta lynchi*), if present, would only occur in the seasonal wetlands with an extended inundation period in the winter and springs. All seasonal wetlands will be avoided; therefore, no impacts will occur to such. California red-legged frog (*Rana draytonii*) and western pond turtle (*Emys marmorata*) may use Huichica Creek for migration and foraging; however, breeding on-site is unlikely due a lack of high quality suitable conditions for such. The project footprint (200 to 1,800 square feet, total) is very small and entirely located within upland areas (developed, non-native grassland) unlikely to support either of these species. A pre-construction survey by a qualified biologist should be conducted within the Project Area immediately prior to project initiation to ensure that neither species are present. If either are present in the Project Area, they should be allowed to leave without assistance or harassment of any kind. A worker education awareness program (WEAP) shall consist of a qualified biologist providing construction personnel with information regarding the identification and ecology of special-status wildlife, the potential for occurrence of these species within work areas, the legal status of the species and ramifications for take, and the specific measures being implemented to avoid impacts to such species.

Steelhead (*Oncorhynchus mykiss irideus*) and California freshwater shrimp (*Syncaris pacifica*) have been documented within Huichica Creek, and for purposes of the project here, they are assumed present. These species would be confined entirely to waters of the Huichica Creek; the project footprint is entirely located in upland areas or well below the bottom of the creek bed, which will clearly avoid impacts to these species. It is WRA's understanding that drilling underneath Huichica Creek is highly unlikely to cause

frac-out and at the request of CDFW a frac-out minimization and avoidance plan has been prepared and will be implement. Therefore, impacts to these species are unlikely to occur due to the proposed project.

Please contact me with any questions.

Sincerely,

Aaron Arthur
Senior Biologist

Enclosures: Attachment A – Figures
Attachment B – Observed Species List
Attachment C – Special-status Species Potential within the Study Area

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Path: C:\Acad 2000 Files\320000\320109\Fig A-1_Location.mxd

Sources: National Geographic, WRA | Prepared By: aarthur, 7/5/2022

Figure A-1. Study Area Location

2155 Duhig Road
Napa County, CA

0 1.75 3.5 Miles

N

wra ENVIRONMENTAL CONSULTANTS

Figure A-2. Study Area and Project Area Land Cover

2155 Duhig Road
Napa County, CA

0 100 200 Feet

N

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Table B-1. Plant species observed in the Study Area, April 28 and June 16, 2022

Family	Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator[3]
Adoxaceae	*Sambucus nigra* ssp. *caerulea*	blue elderberry	deciduous shrub	native	--	--	FAC
Alismataceae	*Alisma lanceolatum*	lanceleaf water plantain	perennial forb	non-native	--	--	OBL
Apiaceae	*Conium maculatum*	poison hemlock	perennial forb	non-native	--	moderate	FACW
Apiaceae	*Daucus carota*	Queen Anne's lace	perennial forb	non-native	--	assessed	UPL
Apiaceae	*Eryngium aristulatum* var. *aristulatum*	California button celery	perennial forb	native	--	--	OBL
Apiaceae	*Foeniculum vulgare*	fennel	perennial forb	non-native	--	high	NL
Arecaceae	*Phoenix canariensis*	Canary Island date palm	evergreen tree	non-native	--	limited	NL
Asteraceae	*Baccharis pilularis* ssp. *consanguinea*	coyote brush	evergreen shrub	native	--	--	NL
Asteraceae	*Calendula arvensis*	field marigold	annual forb	non-native	--	--	NL
Asteraceae	*Carduus pycnocephalus*	Italian thistle	annual forb	non-native	--	moderate	NL
Asteraceae	*Centaurea calcitrapa*	purple star thistle	annual forb	non-native	--	moderate	NL
Asteraceae	*Cichorium intybus*	chicory	perennial forb	non-native	--	--	FACU
Asteraceae	*Dittrichia graveolens*	stinkwort	annual forb	non-native	--	moderate	NL
Asteraceae	*Helminthotheca echioides*	bristly ox-tongue	perennial forb	non-native	--	limited	FAC
Asteraceae	*Hypochaeris radicata*	rough cat's-ear	perennial forb	non-native	--	moderate	FACU
Asteraceae	*Lactuca serriola*	prickly lettuce	annual forb	non-native	--	assessed	FACU
Asteraceae	*Silybum marianum*	milk thistle	perennial forb	non-native	--	limited	NL
Asteraceae	*Soliva sessilis*	field burweed	annual forb	non-native	--	--	FACU
Asteraceae	*Sonchus asper ssp. asper*	prickly sow thistle	annual forb	non-native	--	assessed	FAC
Asteraceae	*Xanthium strumarium*	rough cocklebur	annual forb	native	--	--	FAC
Azollaceae	*Azolla filiculoides*	Pacific mosquitofern	annual fern	native	--	--	OBL
Boraginaceae	*Plagiobothrys stipitatus* var. *micranthus*	stalked popcornflower	annual forb	native	--	--	FACW
Brassicaceae	*Brassica nigra*	black mustard	annual forb	non-native	--	moderate	NL
Brassicaceae	*Brassica rapa*	field mustard	annual forb	non-native	--	limited	FACU
Brassicaceae	*Raphanus sativus*	wild radish	perennial forb	non-native	--	limited	NL
Cactaceae	*Opuntia ficus-indica*	tuna cactus	evergreen shrub	non-native	--	--	NL

Family	Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator[3]
Caryophyllaceae	*Cerastium glomeratum*	mouse-ear chickweed	annual forb	non-native	--	--	UPL
Caryophyllaceae	*Silene gallica*	windmill pink	annual forb	non-native	--	--	NL
Caryophyllaceae	*Spergularia rubra*	red sandspurry	perennial forb	non-native	--	--	FAC
Convolvulaceae	*Convolvulus arvensis*	field bindweed	perennial forb	non-native	--	assessed	NL
Cyperaceae	*Carex barbarae*	Santa Barbara sedge	perennial graminoid	native	--	--	FAC
Cyperaceae	*Cyperus eragrostis*	tall flat-sedge	perennial graminoid	native	--	--	FACW
Cyperaceae	*Eleocharis macrostachya*	common spikerush	perennial graminoid	native	--	--	OBL
Dipsacaceae	*Dipsacus fullonum*	Fuller's teasel	perennial forb	non-native	--	moderate	FAC
Fabaceae	*Lotus corniculatus*	bird's-foot trefoil	perennial forb	non-native	--	assessed	FAC
Fabaceae	*Medicago polymorpha*	bur medic	annual forb	non-native	--	limited	FACU
Fabaceae	*Robinia pseudoacacia*	black locust	deciduous tree	non-native	--	limited	FACU
Fabaceae	*Trifolium glomeratum*	clustered clover	annual forb	non-native	--	--	NL
Fabaceae	*Trifolium hirtum*	rose clover	annual forb	non-native	--	moderate	NL
Fabaceae	*Trifolium repens*	white clover	perennial forb	non-native	--	--	FACU
Fabaceae	*Trifolium subterraneum*	subterranean clover	annual forb	non-native	--	--	NL
Fabaceae	*Vicia sativa*	common vetch	annual forb	non-native	--	--	FACU
Fagaceae	*Quercus agrifolia*	coast live oak	evergreen tree	native	--	--	NL
Fagaceae	*Quercus lobata*	valley oak	deciduous tree	native	--	--	FACU
Gentianaceae	*Zeltnera muehlenbergii*	Monterey centaury	annual forb	native	--	--	FAC
Geraniaceae	*Erodium brachycarpum*	foothill filaree	annual forb	non-native	--	limited	NL
Geraniaceae	*Erodium cicutarium*	redstem stork's bill	annual forb	non-native	--	limited	NL
Geraniaceae	*Geranium dissectum*	cutleaf geranium	annual forb	non-native	--	moderate	NL
Juglandaceae	*Juglans hindsii*	black walnut	deciduous tree	native	--	--	FAC
Juncaceae	*Juncus balticus* ssp. *ater*	Baltic rush	perennial graminoid	native	--	--	FACW
Juncaceae	*Juncus bufonius*	toad rush	annual graminoid	native	--	--	FACW
Juncaceae	*Juncus patens*	common rush	perennial graminoid	native	--	--	FACW
Juncaceae	*Juncus phaeocephalus*	brownhead rush	perennial graminoid	native	--	--	FACW

Family	Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator[3]
Lamiaceae	*Mentha pulegium*	pennyroyal	perennial forb	non-native	--	moderate	OBL
Lythraceae	*Lythrum hyssopifolia*	hyssop loosestrife	annual forb	non-native	--	moderate	OBL
Malvaceae	*Malva nicaeensis*	bull mallow	annual forb	non-native	--	--	NL
Myrsinaceae	*Lysimachia arvensis*	scarlet pimpernel	annual forb	non-native	--	--	NL
Myrtaceae	*Eucalyptus globulus*	blue gum	evergreen tree	non-native	--	moderate	NL
Oleaceae	*Fraxinus latifolia*	Oregon ash	deciduous tree	native	--	--	FACW
Plantaginaceae	*Callitriche heterophylla*	water starwort	annual forb	native	--	--	OBL
Plantaginaceae	*Plantago lanceolata*	English plantain	perennial forb	non-native	--	limited	FAC
Poaceae	*Avena barbata*	wild oat	annual graminoid	non-native	--	moderate	NL
Poaceae	*Briza maxima*	big rattlesnake grass	annual graminoid	non-native	--	limited	NL
Poaceae	*Briza minor*	little rattlesnake grass	annual graminoid	non-native	--	--	FAC
Poaceae	*Bromus diandrus*	rip-gut brome	annual graminoid	non-native	--	moderate	NL
Poaceae	*Bromus hordeaceus*	soft chess	annual graminoid	non-native	--	limited	FACU
Poaceae	*Cynodon dactylon*	Bermuda grass	perennial graminoid	non-native	--	moderate	FACU
Poaceae	*Elymus triticoides*	beardless wild rye	perennial graminoid	native	--	--	FAC
Poaceae	*Festuca arundinacea*	tall fescue	perennial graminoid	non-native	--	moderate	FACU
Poaceae	*Festuca perennis*	Italian rye grass	annual graminoid	non-native	--	moderate	FAC
Poaceae	*Glyceria declinata*	waxy manna grass	perennial graminoid	non-native	--	moderate	FACW
Poaceae	*Hordeum brachyantherum*	meadow barley	perennial graminoid	native	--	--	FACW
Poaceae	*Hordeum marinum*	Mediterranean barley	annual graminoid	non-native	--	moderate	FAC
Poaceae	*Hordeum murinum*	mouse barley	annual graminoid	non-native	--	moderate	FACU
Poaceae	*Phalaris aquatica*	harding grass	perennial graminoid	non-native	--	moderate	FACU
Poaceae	*Pleuropogon californicus* var. *californicus*	annual semaphore grass	perennial graminoid	native	--	--	OBL
Poaceae	*Polypogon monspeliensis*	rabbit's-foot grass	annual graminoid	non-native	--	limited	FACW
Poaceae	*Stipa pulchra*	purple needlegrass	perennial graminoid	native	--	--	NL
Polygonaceae	*Persicaria maculosa*	spotted lady's-thumb	annual forb	non-native	--	--	FACW

Family	Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator[3]
Polygonaceae	*Polygonum aviculare*	dooryard knotweed	perennial forb	non-native	--	--	FAC
Polygonaceae	*Rumex acetosella*	sheep sorrel	perennial forb	non-native	--	moderate	FACU
Polygonaceae	*Rumex crispus*	curly dock	perennial forb	non-native	--	limited	FAC
Polygonaceae	*Rumex pulcher*	fiddle dock	perennial forb	non-native	--	--	FAC
Ranunculaceae	*Ranunculus muricatus*	spiny buttercup	perennial forb	non-native	--	--	FACW
Rosaceae	*Prunus cerasifera*	cherry plum	deciduous tree	non-native	--	limited	NL
Rosaceae	*Rosa californica*	California rose	evergreen shrub	native	--	--	FAC
Rosaceae	*Rubus armeniacus*	Himalayan blackberry	evergreen shrub	non-native	--	high	FAC
Rubiaceae	*Galium aparine*	common bedstraw	annual forb	native	--	--	FACU
Salicaceae	*Populus nigra*	Lombardy poplar	deciduous tree	non-native	--	--	NL
Salicaceae	*Salix laevigata*	red willow	deciduous tree	native	--	--	FACW
Salicaceae	*Salix lasiolepis*	arroyo willow	deciduous tree	native	--	--	FACW
Sapindaceae	*Aesculus californica*	California buckeye	deciduous tree	native	--	--	NL
Typhaceae	*Typha angustifolia*	narrowleaf cattail	perennial forb	non-native	--	--	OBL

All species identified using the *Jepson Manual, 2nd Edition* (Baldwin et al. 2012), *The Jepson Flora Project* (eFlora 2022), and *A Flora of Napa County* (Ruygt 2020); nomenclature follows *The Jepson Flora Project* (eFlora 2022) unless otherwise noted

Sp.: “species”, intended to indicate that the observer was confident in the identity of the genus but uncertain which species
Cf.: “*confer*” or “compared with”, intended to indicate a species appeared to the observer to be specific, but was not identified based on diagnostic characters

[1]Rare Status: The CNPS Inventory of Rare and Endangered Plants (CNPS 2022a)

FE:	Federal Endangered
FT:	Federal Threatened
SE:	State Endangered
ST:	State Threatened
SR:	State Rare
CRPR 1A:	Plants presumed extirpated in California and either rare or extinct elsewhere
CRPR 1B:	Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A:	Plants presumed extirpated in California, but more common elsewhere
CRPR 2B:	Plants rare, threatened, or endangered in California, but more common elsewhere
CRPR 3:	Plants about which we need more information – a review list
CRPR 4:	Plants of limited distribution – a watch list

[2]Invasive Status: California Invasive Plant Inventory (Cal-IPC 2006)

High:	Severe ecological impacts; high rates of dispersal and establishment; most are widely distributed ecologically.
Moderate:	Substantial and apparent ecological impacts; moderate-high rates of dispersal, establishment dependent on disturbance; limited moderate distribution ecologically
Limited:	Minor or not well documented ecological impacts; low-moderate rate of invasiveness; limited distribution ecologically
Assessed:	Assessed by Cal-IPC and determined to not be an existing current threat

[3]Wetland Status: National List of Plant Species that Occur in Wetlands, Arid West Region (Corps 2020)

OBL:	Almost always a hydrophyte, rarely in uplands
FACW:	Usually a hydrophyte, but occasionally found in uplands
FAC:	Commonly either a hydrophyte or non-hydrophyte
FACU:	Occasionally a hydrophyte, but usually found in uplands
UPL:	Rarely a hydrophyte, almost always in uplands
NL:	Rarely a hydrophyte, almost always in uplands
NI:	No information; not factored during wetland delineation

Table B-2. Wildlife species observed in and around the Study Area

Scientific Name	Common Name
Mammals	
Bos taurus	domestic cow
Odocoileus hemionus columbianus	black-tailed deer
Birds	
Corvus brachyrhynchos	American crow
Falco sparverius	American kestrel
Myiarchus cinerascens	ash-throated flycatcher
Sayornis nigricans	black phoebe
Icterus bullockii	Bullock's oriole
Melozone crissalis	California towhee
Sturnus vulgaris	European starling
Spinus psaltria	lesser goldfinch
Anas platyrhynchos	mallard
Zenaida macroura	mourning dove
Mimus polyglottos	northern mockingbird
Buteo jamaicensis	red-tailed hawk
Agelaius phoeniceus	red-winged blackbird
Columba livia	rock pigeon
Buteo swainsoni	Swainson's hawk
Tachycineta bicolor	tree swallow
Cathartes aura	turkey vulture
Sialia mexicana	western bluebird
Reptiles and Amphibians	
Emys marmorata	western pond turtle

Table C. Potential for Special-status Species to Occur in the Study Area. List compiled from the Napa County Baseline Data Report (NCBDR; Napa County 2005), CDFW BIOS database (CDFW 2022a), USFWS IPaC Report (USFWS 2022b), and CNPS Electronic Inventory (CNPS 2022a) searches. For plants, the Sonoma, Napa, Mt. George, Sears Point, Cuttings Wharf, Cordelia, Petaluma Point, Mare Island, and Benicia USGS 7.5' quadrangles were included in the search. For wildlife, the entirety of Napa County was considered.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
PLANTS				
Agrostis hendersonii Henderson's bentgrass	CRPR 3	Valley and foothill grassland, vernal pools; situated in mesic grasslands; wetland indicator: FACW/FACW. Elevation range: 225 – 995 feet. Blooms: April – June.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Allium peninsulare var. *franciscanum* Franciscan onion	CRPR 1B	Cismontane woodland, valley and foothill grassland; on clay substrate, often derived from volcanics or serpentine; serpentine indicator: WI. Elevation range 170 – 985 feet. Blooms: May – June.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine grassland or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Amorpha californica var. *napensis* Napa false indigo	CRPR 1B	Openings in broadleaf upland forest, chaparral, cismontane woodland. Elevation range: 395 – 6560 feet. Blooms: April – July.	**No Potential.** The Study Area does not contain chaparral, foothill woodland, or forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Antirrhinum virga twig-like snapdragon	CRPR 4	Chaparral, lower montane coniferous forest; located on rocky openings often derived from serpentine; serpentine indicator: SI. Elevation range: 325 – 6550 feet. Blooms: June – July.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine chaparral or forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Arabis modesta modest rockcress	CRPR 4	Chaparral, lower montane coniferous forest; located on steep slopes, cliffs, and shaded canyons underlain by deep soils. Elevation range: 390 – 2600 feet. Blooms: March – July.	**No Potential.** The Study Area does not contain steep slopes in chaparral or forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Astragalus tener var. *tener* alkali milk-vetch	CRPR 1B	Playas, vernal pools, valley and foothill grassland; located in vernal pools and similar wetlands/mesic areas on alkaline substrate. Elevation range: 0 – 195 feet. Blooms: March – June.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Balsamorhiza macrolepis big-scale balsamroot	CRPR 1B	Valley and foothill grassland, cismontane woodland; situated on rocky substrates, typically derived from metavolcanics, sometimes on serpentine substrate; serpentine indicator: SI. Elevation range: 295 – 3100 feet. Blooms: March – June.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine grassland or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Blennosperma bakeri Sonoma sunshine	FE, SE, CRPR 1B	Vernal pools, vernal swales, and mesic areas in valley grassland; highly restricted to the Santa Rosa Plain and Valley of the Moon. Elevation range: 35 – 360 feet. Blooms: March – April.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Blepharizonia plumosa big tarplant	CRPR 1B	Valley and foothill grassland; located on dry hills and plains in annual grasslands on clay to clay loam substrates, often in recently burned areas. Elevation range: 90 – 1645 feet. Blooms: July – October.	**Unlikely.** Although the Study Area contains grassland, this species is typically situated on heavy clay soils that are absent and it is restricted to the East Bay and southward (Calflora 2022, CDFW 2022a).	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Brodiaea leptandra narrow-anthered brodiaea	CRPR 1B	Broadleaf upland forest, chaparral, lower montane coniferous forest; situated on gravelly soils derived from volcanics, particularly rhyolitic tuff, sometimes serpentine; serpentine indicator: WI. Elevation range: 360 – 3000 feet. Blooms: May – July.	**No Potential.** The Study Area does not contain rocky volcanic chaparral or forest/woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Calandrinia breweri Brewer's Calandrinia	CRPR 4	Chaparral, coastal scrub; located on sandy or loamy substrate in areas often recently disturbed or burned. Elevation range: 30 – 3965 feet. Blooms: March – June.	**No Potential.** The Study Area does not contain chaparral or coastal scrub habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Calochortus pulchellus Mt. Diablo fairy-lantern	CRPR 1B	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. Elevation range: 90 – 2500 feet. Blooms: April - June	**No Potential.** The Study Area does not contain chaparral or foothill woodland habitat to support this species. Restricted to the Mount Diablo area, Contra Costa County.	**Not Present.** No further actions are recommended for this species.
Carex lyngbyei Lyngbye's sedge	CRPR 2B	Marshes and swamps; located in brackish or freshwater. Elevation range: 0 - 30 feet. Blooms April - August	**No Potential.** The Study Area does not contain coastal brackish or freshwater marsh habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Castilleja affinis ssp. *neglecta* Tiburon paintbrush	FE; ST; CRPR 1B	Valley and foothill grassland; located in grassy, open areas and rock outcrops underlain by serpentine substrate; serpentine indicator: SE. Elevation range: 195 – 1300 feet. Blooms: April – June.	**No Potential.** The Study Area does not contain rocky serpentine grassland habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Castilleja ambigua ssp. *ambigua* Johnny-nip	CRPR 4	Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pool margins. Elevation range: 0 – 1415 feet. Blooms: March – August.	**Moderate Potential.** The Study Area contains seasonal wetland margins that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Ceanothus confusus Rincon Ridge ceanothus	CRPR 1B	Closed-cone coniferous forest, chaparral, cismontane woodland; known from volcanic and serpentine substrate; typically situated on dry shrubby slopes; serpentine indicator: WI/IN. Elevation range: 245 – 3495 feet. Blooms: February – April.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine chaparral or forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Ceanothus purpureus holly-leaved ceanothus	CRPR 1B	Chaparral, cismontane woodland; located on rocky, volcanic slopes. Elevation range: 395 – 3000 feet. Blooms: February – June.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine chaparral or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Ceanothus sonomensis Sonoma ceanothus	CRPR 1B	Chaparral; located on sandy serpentine or volcanic substrates; serpentine indicator: WI/IN. Elevation range: 705 – 2625 feet. Blooms: February – April.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine chaparral habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Centromadia parryi ssp. *congdonii* Congdon's tarplant	CRPR 1B	Valley and foothill grassland; located on alkaline heavy white clay substrate. Elevation range: 0 – 750 feet. Blooms: May – November.	**Moderate Potential.** The Study Area contains grasslands and seasonal wetland margins that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Centromadia parryi ssp. *parryi* pappose tarplant	CRPR 1B	Coastal prairie, meadows and seeps, coastal salt marsh, valley and foothill grassland; in vernally mesic sites, often with alkali substrate. Elevation range: 5 – 1380 feet. Blooms: May – November.	**Moderate Potential.** The Study Area contains grasslands and seasonal wetland margins that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Centromadia parryi ssp. *rudis* Parry's rough tarplant	CRPR 4	Valley and foothill grassland, vernal pools; situated on vernally mesic sites underlain by alkaline soils, frequently seeps, swales, and roadsides. Elevation range: 0 – 330 feet. Blooms: May – October.	**Moderate Potential.** The Study Area contains grasslands and seasonal wetland margins that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Chloropyron molle ssp. *molle* soft bird's-beak	FE, SR, CRPR 1B	Coastal brackish or salt marshes; located in low-growing saltgrass and picklweed mats. Elevation range: 0 – 10 feet. Blooms: June – November.	**No Potential.** The Study Area does not contain coastal brackish marsh habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Cicuta maculata var. bolanderi Bolander's water hemlock	CRPR 2B	Marshes and swamps; in coastal, fresh, or brackish perennial waters. Elevation range: 0 – 600 feet. Blooms: July – September.	**Moderate Potential.** The Study Area contains riparian woodland that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Clarkia gracilis ssp. *tracyi* Tracy's clarkia	CRPR 4	Chaparral; located in openings and situated on substrates often derived from serpentine; serpentine indicator: BE. Elevation range: 210 – 2115 feet. Blooms: April – July.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine chaparral habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Dirca occidentalis western leatherwood	CRPR 1B	Broadleaf upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, North Coast coniferous forest, riparian forest, riparian woodland; located on brushy, mesic slopes in woodland and forest. Elevation range: 165 – 1285 feet. Blooms: January – April.	**No Potential.** The Study Area does not contain chaparral, foothill woodland, or forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Downingia pusilla dwarf downingia	CRPR 2B	Valley and foothill grassland, vernal pools; located in mesic grassy sites, pool and lake margins. Elevation range: 3 – 1450 feet. Blooms: March – May.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Eleocharis parvula small spikerush	CRPR 4	Marshes and swamps. Elevation range: 5 – 9815 feet. Blooms: sometimes April, June – August, sometimes September.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Erigeron biolettii Streamside daisy	CRPR 3	Broadleaf upland forest, cismontane woodland, North Coast coniferous forest; on rocky, mesic. Elevation range: 95 – 3610 feet. Blooms: June – October.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine grassland or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Erigeron greenei Greene's narrow-leaved daisy	CRPR 1B	Chaparral; located on volcanic or serpentine substrate. Elevation range: 260 – 3270 feet. Blooms: May – September.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine grassland or chaparral habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Eryngium jepsonii Jepson's coyote thistle	CRPR 1B	Valley and foothill grassland, vernal pools; situated on clay substrate that is vernally saturated. Elevation range: 10 – 975 feet. Blooms: April – August.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Erythronium helenae St. Helena fawn lily	CRPR 4	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland; located on volcanic or serpentine substrate; serpentine indicator: BE. Elevation range: 1135 – 3965 feet. Blooms: March – May.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine grassland or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Extriplex joaquiniana San Joaquin spearscale	CRPR 1B	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland; located on alkaline substrate. Elevation range: 0 – 2715 feet. Blooms: April – October.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Fritillaria liliacea fragrant fritillary	CRPR 1B	Coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland; located in grassy sites underlain by clay, typically derived from volcanics or serpentine; serpentine indicator: WI. Elevation range: 10 – 1335 feet. Blooms: February – April.	**Unlikely.** Although the Study Area contains grassland, this species is typically situated on heavy clay soils that are absent.	**Not Present.** No further actions are recommended for this species.
Harmonia nutans nodding harmonia	CRPR 4	Chaparral, cismontane woodland; located on rocky to gravelly substrates derived from volcanics. Elevation range: 240 – 3170 feet. Blooms: March – May.	**No Potential.** The Study Area does not contain rocky volcanic grassland, chaparral, or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Helianthella castanea Diablo helianthella	CRPR 1B	Broadleaf upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Elevation range: 180 – 3900 feet. Blooms: March - June	**Unlikely.** Although the Study Area contains riparian woodland, this species is limited to woodlands and grasslands in the East Bay and South Bay.	**Presumed Absent.** No further actions are recommended for this species.
Hemizonia congesta ssp. congesta Hayfield tarplant	CRPR 1B	Coastal scrub, valley and foothill grassland; serpentine indicator: WI/IN. Elevation range: 65 – 1840 feet. Blooms: April – October.	**Moderate Potential.** The Study Area contains grasslands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Hesperolinon bicarpellatum Two-carpellate western flax	CRPR 1B	Chaparral; located on serpentine substrate; serpentine indicator: SE. Elevation range: 195 – 3270 feet. Blooms: May – July.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine chaparral habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Hesperolinon breweri Brewer's western flax	CRPR 1B	Chaparral, cismontane woodland, valley and foothill grassland; typically located in serpentine grassland and serpentine chaparral underlain by rocky substrates; serpentine indicator: SI. Elevation range: 95 – 2925 feet. Blooms: May – July.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine grassland, chaparral, or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Horkelia tenuiloba thin-lobed horkelia	CRPR 1B	Broadleaf upland forest, coastal scrub, valley and foothill grassland, chaparral; in mesic openings, on acidic sandy substrate. Elevation range: 165 – 1640 feet. Blooms: May – July.	**No Potential.** The Study Area does not contain acidic sands underlying grassland, scrub, chaparral, or forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Iris longipetala coast iris	CRPR 4	Coastal prairie, lower montane coniferous forest, meadows and seeps; located on mesic sites. Elevation range: 0 – 1950 feet. Blooms: March – May.	**No Potential.** The Study Area does not contain coastal prairie or forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Isocoma arguta Carquinez goldenbush	CRPR 1B	Valley and foothill grassland; located on alkaline soils. Elevation range: 0 – 60 feet. Blooms: August – December.	**Unlikely.** Although the Study Area contains grasslands, this species is restricted alkali grasslands in Solano County.	**Not Present.** No further actions are recommended for this species.
Lasthenia conjugens Contra Costa goldfields	FE, CRPR 1B	Valley and foothill grassland, vernal pools, cismontane woodland; located in pools, swales, and depressions in mesic grassy sites underlain by alkaline substrate. Elevation range: 0 – 1530 feet. Blooms: March – June.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Lathyrus jepsonii var. *jepsonii* Delta tule pea	CRPR 1B	Freshwater and brackish marshes; typically located near or on slough margins, closely associated with cattail, tules, bulrushes, Baltic rush, California rose, and Suisun Marsh aster; known widely throughout Suisun Bay and Delta regions. Elevation range: 0 – 15 feet. Blooms: May – July, sometimes September.	**No Potential.** The Study Area does not contain coastal brackish marsh habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Legenere limosa legenere	CRPR 1B	Vernal pools; typically located in the deepest portions of pools. Elevation range: 3 – 2860 feet. Blooms: April – June.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Leptosiphon acicularis bristly leptosiphon	CRPR 4, LR	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland; often located on shallow, rocky substrate in foothill positions. Elevation range: 175 – 4875 feet. Blooms: April – July.	**No Potential.** The Study Area does not contain rocky foothill grassland, chaparral, or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Leptosiphon jepsonii Jepson's leptosiphon	CRPR 1B	Chaparral, cismontane woodland; on open to partially shaded grassy slopes on volcanic or the periphery of serpentine substrate. Elevation range: 330 – 1640 feet. Blooms: April – May.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine grassland, chaparral, or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Lessingia hololeuca woolly-headed lessingia	CRPR 3, LR	Broadleaf upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland; typically on clay, serpentine substrate; serpentine indicator: SI. Elevation range: 3 – 2885 feet. Blooms: April – June.	**No Potential.** The Study Area does not contain rocky serpentine grassland, chaparral, or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Lilaeopsis masonii Mason's Lilaeopsis	SR, CRPR 1B	Freshwater and brackish coastal marshes, riparian scrub; located on channel banks in the splash zone on bare mud substrate. Elevation range: 0 – 35 feet. Blooms: April – November.	**No Potential.** The Study Area does not contain coastal brackish marsh habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Lilium rubescens redwood lily	CRPR 4, LR	Broadleaf upland forest, chaparral, lower montane coniferous forest, upper montane coniferous forest, North Coast coniferous forest; often located on serpentine or volcanic substrates, and along roadcuts; serpentine indicator: WI. Elevation range: 95 – 6210 feet. Blooms: April – September.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine grassland or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Lomatium repostum Napa Lomatium	CRPR 1B	Chaparral, cismontane woodland; located on serpentine or volcanic substrates; serpentine indicator: SI. Elevation range: 290 – 2700 feet. Blooms: March – June.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine chaparral or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Lupinus sericatus Cobb Mountain lupine	CRPR 1B	Broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest; typically located in stands of knobcone pine-oak woodland, on open wooded slopes in gravelly substrate typically derived from volcanics, sometimes serpentine. Elevation range: 890 – 4960 feet. Blooms: March – June.	**No Potential.** The Study Area does not contain rocky volcanic chaparral, woodland, or forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Monardella antonina ssp. *antonina* San Antonio hills monardella	CRPR 3	Chaparral, cismontane woodland. Elevation range: 1000 – 3280 feet. Blooms: June – August.	**No Potential.** The Study Area does not contain chaparral habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Monardella viridis green monardella	CRPR 4	Broadleaf upland forest, chaparral, cismontane woodland; situated on serpentine or volcanic soils; serpentine indicator: BE/SI. Elevation range: 325 – 3285 feet. Blooms: June – September.	**No Potential.** The Study Area does not contain rocky volcanic or serpentine chaparral, woodland, or forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Polygonum marinense Marin knotweed	CRPR 3	Salt and brackish coastal marshes. Elevation range: 0 – 35 feet. Blooms: sometimes April, May – August, sometimes October.	**No Potential.** The Study Area does not contain coastal brackish marsh habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Ranunculus lobbii Lobb's buttercup	CRPR 4	Cismontane woodland, North Coast coniferous forest, valley and foothill grassland, vernal pools; located in mesic, vernally wet areas. Elevation range: 45 – 1530 feet. Blooms: February – May.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Rhynchospora californica California beaked-rush	CRPR 1B	Bogs and fens, lower montane coniferous forest, meadows and seeps, freshwater marshes and swamps. Elevation range: 145 – 3315 feet. Blooms: May – July.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Senecio aphanactis chaparral ragwort	CRPR 1B	Cismontane woodland, chaparral, coastal scrub; located on drying alkaline flats. Elevation range: 45 – 2600 feet. Blooms: January – April.	**No Potential.** The Study Area does not contain chaparral habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Sidalcea hickmanii ssp. *napensis* Napa checkerbloom	CRPR 1B	Chaparral; located on rhyolitic substrates. Elevation range: 1345 – 1985 feet. Blooms: April – June.	**No Potential.** The Study Area does not contain rocky volcanic chaparral habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Spergularia macrotheca var. *longistyla* long-styled sand-spurry	CRPR 1B	Meadow and seep, marshes and swamps; located in alkaline marshes, pools, mud flats, meadows, and hot springs. Elevation range: 0 – 830 feet. Blooms: February – March.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Symphyotrichum lentum Suisun Marsh aster	CRPR 1B	Freshwater and brackish marshes and swamps; typically located on slough margins and edges, closely associated with cattail, tules, bulrushes, California rose, and Delta Tule pea. Elevation range: 0 – 10 feet. Blooms: May – November.	**No Potential.** The Study Area does not contain coastal brackish marsh habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Trichostema ruygtii Napa bluecurls	CRPR 1B, LR	Cismontane woodland, chaparral, valley and foothill grassland, vernal pools, lower montane coniferous forest; located in open, sunny locations, and dried vernal pools. Elevation range: 95 – 2210 feet. Blooms: June – October.	**No Potential.** The Study Area does not contain rocky volcanic grassland, chaparral, or woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Trifolium amoenum showy rancheria clover	FE, CRPR 1B	Valley and foothill grassland, coastal bluff scrub, swales, open sunny sites, sometimes on serpentine; serpentine indicator: WI/IN. Elevation range: 15 – 1365 feet. Blooms: April – June.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Trifolium hydrophilum saline clover	CRPR 1B	Marshes and swamps, mesic portions of alkali vernal pools; mesic, alkali valley and foothill grassland. Elevation range: 0 – 985 feet. Blooms: April – June.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Not Observed.** This species was not observed during protocol-level plant surveys. No further actions are recommended for this species.
Triteleia lugens dark-mouthed triteleia	CRPR 4, LR	Broadleaf upland forest, chaparral, lower montane coniferous forest, coastal scrub. Elevation range: 325 – 3250 feet. Blooms: April – June.	**No Potential.** The Study Area does not contain chaparral or forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Viburnum ellipticum oval-leaved viburnum	CRPR 2B	Chaparral, cismontane woodland, lower montane coniferous forest. Elevation range: 705 – 4595 feet. Blooms: May – June.	**No Potential.** The Study Area does not contain chaparral or foothill woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
WILDLIFE				
Mammals				
Antrozous pallidus pallid bat	SSC, WBWG High	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, forages along river channels. Roost sites include crevices in rocky outcrops and cliffs, caves, mines, trees and various manmade structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Unlikely.** Although the Study Area contains large trees, a brief investigation resulted in a lack of significant cavity features. The project will not remove or otherwise impact trees.	**Presumed Absent.** No further actions are recommended for this species.
Bassariscus astutus ringtail (ringtail cat)	SFP	Widely distributed throughout much of California. Found in a variety of habitats including riparian areas, semi-arid country, deserts, chaparral, oak woodlands, pinyon pine woodlands, juniper woodlands and montane conifer forests usually under 4,600 ft. elevation. Typically uses cliffs or large trees for shelter.	**Unlikely.** The Study Area lacks cliffs and large trees with hollows or cavities to support this species.	**Presumed Absent.** No further actions are recommended for this species.
Corynorhinus townsendii townsendii Townsend's western big-eared bat	SSC, WBWG High	Humid coastal regions of northern and central California. Roost in limestone caves, lava tubes, mines, buildings etc. Will only roost in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to disturbance	**Unlikely.** The Study Area does not contain caves, mines, or buildings suitable for roosting; the on-site barn appeared to be regularly used/occupied. CNDDB occurrences in Napa County are all located in the northern portion of the County (CDFW 2022a).	**Presumed Absent.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Eumops perotis californicus western mastiff bat	SSC, WBWG High	Found in a wide variety of open, arid and semi-arid habitats. Distribution appears to be tied to large rock structures which provide suitable roosting sites, including cliff crevices and cracks in boulders.	**Unlikely.** The Study Area lacks large rock structures that are suitable for roosting. There are no CNDDB occurrences of this species in Napa County (CDFW 2022a).	**Presumed Absent.** No further actions are recommended for this species.
Lasiurus blossevillii western red bat	SSC, WBWG High	Highly migratory and typically solitary, roosting primarily in the foliage of trees or shrubs. It is associated with broad-leaved tree species including cottonwoods, sycamores, alders, and maples. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas.	**Unlikely.** The Study Area lacks large, broadleaved trees of the type typically used for roosting (maples, sycamores, etc.).	**Presumed Absent.** No further actions are recommended for this species.
Myotis thysanodes fringed myotis	WBWG High	Associated with a wide variety of habitats including dry woodlands, desert scrub, mesic coniferous forest, grassland, and sage-grass steppes. Building, mines, and large trees and snags are important day and night roosts.	**Unlikely.** Although the Study Area contains large trees, a brief investigation resulted in a lack of significant cavity features. The project will not remove or otherwise impact trees.	**Presumed Absent.** No further actions are recommended for this species.
Myotis volans long-legged myotis	WBWG High	Primarily found in coniferous forests, but also occurs seasonally in riparian and desert habitats. Large hollow trees, rock crevices, buildings, mines, and caves are important day roosts.	**Unlikely.** The Study Area lacks caves, buildings or similar refugia and does not contain coniferous forest.	**Presumed Absent.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Reithrodontomys raviventris salt marsh harvest mouse	FE, SE, SFP	Endemic to emergent salt and brackish wetlands of the San Francisco Bay Estuary. Pickleweed marshes are primary habitat; also occurs in various other wetland communities with dense vegetation. Does not burrow, builds loosely organized nests. Requires higher areas for dryland refugia during high tides.	**No Potential.** The Study Area contains no tidal or brackish marsh and is outside of this species' Napa County range.	**Not Present.** No further actions are recommended for this species.
Sorex ornatus sinuosus Suisun shrew	SSC	Tidal marshes of the northern shores of San Pablo and Suisun bays. Require dense low-lying vegetation cover, driftwood, and other litter above the mean high tide line for nesting and foraging.	**No Potential.** The Study Area contains no tidal or brackish marsh and is outside of this species' Napa County range.	**Not Present.** No further actions are recommended for this species.
Taxidea taxus American badger	SSC	Most abundant in drier open stages of most shrub, woodland, and herbaceous vegetation types. Requires friable soils and open, uncultivated ground. Preys on burrowing rodents.	**Unlikely.** The Study Area provides some grassland habitat, but it is largely surrounded by intensively managed lands (vineyards) that would preclude this species. Extensive ground squirrel burrows and den openings of the character of this species were not observed in the Study Area.	**Presumed Absent.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Birds				
Agelaius tricolor tricolored blackbird	SC (E), SSC	Nearly endemic to California, where it is most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets. Also uses flooded agricultural fields. Abundant insect prey near breeding areas essential.	**Moderate Potential.** The riparian area of Huichica Creek may provide sub-optimal nesting and foraging for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Ammodramus savannarum grasshopper sparrow	SSC, LR	Summer resident. Breeds in open grasslands in lowlands and foothills, generally with low- to moderate-height grasses and scattered shrubs. Well-hidden nests are placed on the ground.	**Moderate Potential.** The Study Area contains some grassland/herbaceous areas that may provide nesting habitat for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Aquila chrysaetos golden eagle	BGEPA, SFP	Occurs year-round in rolling foothills, mountain areas, sage-juniper flats, and deserts. Cliff-walled canyons provide nesting habitat in most parts of range; also nests in large trees, usually within otherwise open areas.	**Unlikely.** Although the Study Area contains large trees, this species typically nests in more isolated areas, particularly on large mountainous cliffs. May forage over the site. This large, conspicuous species was not observed on several site visits.	**Presumed Absent.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Ardea alba great egret	no status (breeding sites protected by CDFW)	Year-round resident. Nests colonially or semi-colonially, usually in trees, occasionally on the ground or elevated platforms. Breeding sites usually in close proximity to foraging areas: marshes, lake margins, tidal flats, and rivers. Forages primarily on fishes and other aquatic prey, also smaller terrestrial vertebrates.	**Moderate Potential.** The Study Area contains large trees that could provide a rookery for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Ardea herodias great blue heron	LR (breeding sites protected by CDFW)	Year-round resident. Nests colonially or semi-colonially in tall trees and cliffs, also sequested terrestrial substrates. Breeding sites usually in close proximity to foraging areas: marshes, lake margins, tidal flats, and rivers. Forages primarily on fishes and other aquatic prey, also smaller terrestrial vertebrates.	**Moderate Potential.** The Study Area contains large trees that could provide a rookery for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Asio flammeus short-eared owl	SSC	Occurs year-round, but primarily as a winter visitor; breeding very restricted in most of California. Found in open, treeless areas (e.g., marshes, grasslands) with elevated sites for foraging perches and dense herbaceous vegetation for roosting and nesting. Preys mostly on small mammals, particularly voles.	**Moderate Potential.** The Study Area contains open habitat with numerous perches for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Asio otus long-eared owl	SSC	Occurs year-round in California. Nests in trees in a variety of woodland habitats, including oak and riparian, as well as tree groves. Requires adjacent open land with rodents for foraging, and the presence of old nests of larger birds (hawks, crows, magpies) for breeding.	**Moderate Potential.** The Study Area contains riparian woodland that may provide nesting habitat for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Athene cunicularia burrowing owl	SSC	Year-round resident and winter visitor. Occurs in open, dry grasslands and scrub habitats with low-growing vegetation, perches and abundant mammal burrows. Preys upon insects and small vertebrates. Nests and roosts in old mammal burrows, most commonly those of ground squirrels.	**Moderate Potential.** The Study Area provides nominal foraging and nesting habitat; some ground squirrel burrows present, but extensive complexes are absent.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Buteo swainsoni Swainson's hawk	ST	Summer resident in Central Valley and limited portions of the southern California interior. Nests in tree groves and isolated trees in riparian and agricultural areas, including near buildings. Forages in grasslands and scrub habitats as well as agricultural fields, especially alfalfa. Preys on arthropods year-round as well as smaller vertebrates during the breeding season.	**High Potential.** The Study Area contains large trees that could provide nesting substrate for this species. Foraging habitat is present.	**Present.** This species was observed soaring over the site in April and June; nesting behavior or potential nests were not observed. Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Charadrius alexandrines nivosus western snowy plover	FT, SSC	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	**No Potential.** The Study Area does not contain remote, bare ground such as beaches or lake edges to provide nesting for this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Circus hudsonius northern harrier	SSC	Year-round resident and winter visitor. Found in open habitats including grasslands, prairies, marshes and agricultural areas. Nests on the ground in dense vegetation, typically near water or otherwise moist areas. Preys on small vertebrates.	**Moderate Potential.** The Study Area contains open areas for foraging and dense riparian vegetation that may provide nesting for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Contopus cooperi olive-sided flycatcher	SSC	Summer resident. Typical breeding habitat is montane coniferous forests. At lower elevations, also occurs in wooded canyons and mixed forests and woodlands. Often associated with forest edges. Arboreal nest sites located well off the ground.	**No Potential.** The Study Area does not contain conifer forest and/or extensive, dense woodland to support this species.	**Not Present.** No further actions are recommended for this species.
Coturnicops noveboracensis yellow rail	SSC	Summer resident in eastern Sierra Nevada in Mono County, breeding in shallow freshwater marshes and wet meadows with dense vegetation. Also a rare winter visitor along the coast and other portions of the state. Extremely cryptic.	**No Potential.** This species breeds east of the Sierra Nevada.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Cypseloides niger black swift	SSC	Summer resident with a fragmented breeding distribution; most occupied areas in California either montane or coastal. Breeds in small colonies on cliffs behind or adjacent to waterfalls, in deep canyons, and sea-bluffs above surf. Forages aerially over wide areas. No modern nesting records in Napa County.	**No Potential.** The Study Area does not contain waterfalls, large cliffs, or sea-bluffs to support this species.	**Not Present.** No further actions are recommended for this species.
Egretta thula snowy egret	no status (breeding sites protected by CDFW)	Year-round resident. Nests colonially, usually in trees, at times in sequestered beds of dense emergent vegetation (e.g., tules). Rookery sites usually situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.	**Moderate Potential.** The Study Area contains large trees that could provide a rookery for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Elanus leucurus white-tailed kite	SFP	Year-round resident in coastal and valley lowlands with scattered trees and large shrubs, including grasslands, marshes and agricultural areas. Nests in trees, of which the type and setting are highly variable. Preys on small mammals and other vertebrates.	**High Potential.** The Study Area contains open areas for foraging and trees/shrubs sufficient for nesting for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Falco peregrinus anatum American peregrine falcon	SE, SFP	Year-round resident and winter visitor. Occurs near water, including coastal areas, wetlands, lakes and rivers. Usually nests on sheltered cliffs or tall man-made structures. Preys primarily on waterbirds.	**No Potential.** The Study Area does not contain montane cliffs or very large man-made structures to provide nesting substrate for this species.	**Not Present.** No further actions are recommended for this species.
Geothlypis trichas sinuosa San Francisco (saltmarsh) common yellowthroat	SSC	Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	**Moderate Potential.** The riparian area of Huichica Creek may provide nominal nesting habitat for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Haliaeetus leucocephalus bald eagle	BGEPA, SE, SFP	Occurs year-round in California, but primarily a winter visitor; breeding population is growing. Nests in large trees in the vicinity of larger lakes, reservoirs, and rivers. Wintering habitat somewhat more variable but usually features large concentrations of waterfowl or fish.	**Unlikely.** Larger water bodies are not within or in close proximity to the Study Area. As per Smith (2003) and CDFW (2022a), nesting within Napa County is known only from the immediate vicinity of Lake Berryessa.	**Presumed Absent.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Icteria virens yellow-breasted chat	SSC, LR	Summer resident, occurring in riparian areas with an open canopy, very dense understory, and trees for song perches. Nests in thickets of willow (*Salix* ssp.), blackberry (*Rubus* spp.), and wild grape (*Vitis californicus*).	**Moderate Potential.** The riparian area of Huichica Creek may provide nesting habitat for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Lanius ludovicianus loggerhead shrike	SSC, LR	Year-round resident in open woodland, grasslands, savannah, and scrub. Prefers areas with sparse shrubs, trees, posts, and other suitable perches for foraging. Preys upon large insects and small vertebrates. Nests are well-concealed in densely-foliaged shrubs or trees.	**Moderate Potential.** The Study Area contains open areas with sufficient posts and other perches, as well as dense riparian shrubs and trees for nesting.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Laterallus jamaicensis coturniculus California black rail	ST, SFP	Year-round resident in marshes (saline to freshwater) with dense vegetation within four inches of the ground. Prefers larger, undisturbed marshes that have an extensive upper zone and are close to a major water source. Extremely secretive and cryptic.	**No Potential.** The Study Area does contain coastal brackish marsh to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Melospiza melodia samuelis San Pablo song sparrow	SSC	Year-round resident of tidal marshes along the north side of San Francisco and San Pablo Bays. Typical habitat is dominated by pickleweed, with gumplant and other shrubs present in the upper zone for nesting. May forage in areas adjacent to marshes.	**No Potential.** The Study Area does contain coastal brackish marsh to support this species.	**Not Present.** No further actions are recommended for this species.
Nycticorax nycticorax black-crowned night heron	no status (breeding sites protected by CDFW)	Year-round resident. Nests colonially, usually in trees but also in patches of emergent vegetation. Rookery sites are often on islands and usually located adjacent to foraging areas: margins of lakes and bays.	**Moderate Potential.** The Study Area contains large trees that could provide a rookery for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Passerculus sandwichensis alaudinus Bryant's savannah sparrow	SSC	Year-round resident associated with the coastal fog belt, primarily between Humboldt and northern Monterey Counties. Occupies low tidally influenced habitats and adjacent areas, including grasslands. Also uses drier, more upland coastal grasslands. Nests near the ground in taller vegetation, including along levees and canals.	**No Potential.** The Study Area does contain coastal brackish marsh to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Progne subis purple martin	SSC, LR	Summer resident. Inhabits woodlands and low-elevation coniferous forests. Nests in old woodpecker cavities and man-made structures (bridges, utility towers). Nest is often located in tall, isolated tree or snag.	**Unlikely.** Although the Study Area contains riparian woodland, this species is known from extensive dense woodland and forest habitat.	**Presumed Absent.** No further actions are recommended for this species.
Rallus obsoletus obsoletus California Ridgway's (clapper) rail	FE, SE, SFP	Year-round resident in tidal marshes of the San Francisco Bay estuary. Requires tidal sloughs and intertidal mud flats for foraging, and dense marsh vegetation for nesting and cover. Typical habitat features abundant growth of cordgrass and pickleweed. Feeds primarily on mollusks and crustaceans.	**No Potential.** The Study Area does contain coastal brackish marsh to support this species.	**Not Present.** No further actions are recommended for this species.
Riparia riparia bank swallow	ST	Summer resident in riparian and other lowland habitats near rivers, lakes and the ocean in northern California. Nests colonially in excavated burrows on vertical cliffs and bank cuts (natural and manmade) with fine-textured soils. Historical nesting range in southern and central areas of California has been eliminated by habitat loss. Currently known to breed in Siskiyou, Shasta, and Lassen Cos., portions of the north coast, and along Sacramento River from Shasta Co. south to Yolo Co.	**Unlikely.** Although the Study Area contains a perennial stream, there are no steep, dry slopes/cliffs with extensive burrows to provide nesting for this species.	**Presumed Absent.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Setophaga petechia brewsteri (Brewster's) yellow warbler	SSC	Summer resident throughout much of California. Breeds in riparian vegetation close to water, including streams and wet meadows. Microhabitat used for nesting is variable, but dense willow growth is typical. Occurs widely on migration.	**Moderate Potential.** The Study Area contains riparian woodland along Huichica Creek that may provide nesting habitat for this species.	**Presence Unknown.** Initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests found. Avoidance will be a distance buffer determined by a biologist. Follow-up surveys may be necessary to determine fledgling status.
Spizella atrogularis black-chinned sparrow	LR	Summer resident. Typically occurs on arid, rocky slopes with brushy vegetation, e.g. mixed chaparral, and sagebrush.	**No Potential.** The Study Area does not contain chaparral or arid foothill woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Strix occidentalis caurina northern spotted owl	FT,ST, SSC	Year-round resident in dense, structurally complex forests, primarily those with stands of mature conifers. In Napa County, uses both coniferous and mixed (coniferous-hardwood) forests. Nests on platform-like substrates in the forest canopy, including in tree cavities. Preys on mammals.	**No Potential.** The Study Area does not contain forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Xanthocephalus xanthocephalus yellow-headed blackbird	SSC, LR	Summer resident. Breeds colonially in freshwater emergent wetlands with dense vegetation and deep water, often along borders of lakes or ponds. Requires abundant large insects such as dragonflies; nesting is timed for maximum emergence of insect prey.	**Unlikely.** Although the Study Area contains perennial stream, this species typically nests in perennial wetlands peripheral to lakes and ponds.	**Presumed Absent.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Reptiles and Amphibians				
Dicamptodon ensatus California giant salamander	SSC	Occurs in the north-central Coast Ranges. Moist coniferous and mixed forests are typical habitat; also uses woodland and chaparral. Adults are terrestrial and fossorial, breeding in cold, permanent or semi-permanent streams. Larvae usually remain aquatic for over a year.	**No Potential.** The Study Area does not contain foothill/montane forest or dense woodland habitat to support this species.	**Not Present.** No further actions are recommended for this species.
Emys marmorata western pond turtle	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	**High Potential.** Huichica Creek may provide foraging and dispersal habitat. The developed and compacted (cattle grazed pasture) soils adjacent to the stream likely preclude nesting.	**Present.** A single turtle was observed basking on a log in Huichica Creek in April 2022. The project work will be conducted greater than 200 feet from Huichica Creek, during the dry season, and in xeric habitats. A pre-construction survey prior to ground-breaking will be conducted.
Rana boylii foothill yellow-legged frog	SSC	Found in or near rocky streams in a variety of habitats; highly aquatic. Prefers partially-sunlit, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Feeds on invertebrates (aquatic and terrestrial).	**Unlikely.** Although Huichica Creek is a perennial stream, it is in a valley/terrace; this species is typically located in mountainous and hill streams.	**Presumed Absent.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Rana draytonii California red-legged frog	FT, SSC	Lowlands and foothills in or near permanent sources of deep water with dense emergent and/or overhanging riparian vegetation. Favors perennial to intermittent ponds, marshes, and stream pools. Requires 11 to 20 weeks of continuous inundation for larval development. Disperses through upland habitats during and after rains.	**Moderate Potential.** Huichica Creek may provide dispersal and non-breeding aquatic habitat for this species. The seasonal wetlands do not contain a depth or hydroperiod sufficient to provide for breeding.	**Presence Unknown.** Surveys have not been conducted for this species, nor are they recommended. The project work will be conducted greater than 200 feet from Huichica Creek, during the dry season, and in xeric habitats. A pre-construction survey prior to ground-breaking will be conducted.
Taricha rivularis red-bellied newt	SSC	Inhabits coastal forests from southern Sonoma County northward, with an isolated population in Santa Clara County. Redwood forest provides typical habitat, though other forest types (e.g., hardwood) are also occupied. Adults are terrestrial and fossorial. Breeding occurs in streams, usually with relatively strong flows.	**No Potential.** The Study Area does not contain mesic forest habitat to support this species.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Fishes				
Acipenser medirostris green sturgeon	FT, SSC	Spawns in the Sacramento River and Klamath Rivers, at temperatures between 8-14 degrees C. Preferred spawning substrate is large cobble, but can range from clean sand to bedrock.	**No Potential.** The Study Area does not contain suitable anadromous or estuarine waters.	**Not Present.** No further actions are recommended for this species.
Eucyclogobius newberryi tidewater goby	FE, SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches. Requires fairly still but not stagnant water and high oxygen levels.	**No Potential.** The Study Area does not contain brackish or estuarine waters.	**Not Present.** No further actions are recommended for this species.
Hypomesus transpacificus Delta smelt	FT, ST	Endemic to the Sacramento-San Joaquin estuary in areas where salt and freshwater systems meet. Occurs seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt; most often at salinities < 2 ppt.	**No Potential.** The Study Area does not contain estuarine waters.	**Not Present.** No further actions are recommended for this species.
Lampetra ayresi river lamprey	SSC	Lower Sacramento River, San Joaquin River and Russian River. May occur in coastal streams north of San Francisco Bay. Adults need clean, gravelly riffles, Ammocoetes need sandy backwaters or stream edges, good water quality and temps < 25 degrees C.	**No Potential.** The Study Area does not contain suitable anadromous or estuarine waters.	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Mylopharodon conocephalus hardhead	SSC	Known from mid-elevation streams in the Sacramento, San Joaquin, Napa River, and Russian River drainages. Prefer clear, deep pools with sand-gravel-boulder bottoms and slow water velocity.	**Unlikely.** This species is known from larger streams and rivers.	**Presumed Absent.** No further actions are recommended for this species.
Oncorhynchus mykiss irideus steelhead - central CA coast DPS	FT	Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	**High Potential.** Huichica Creek is designated Critical Habitat for this species.	**Assumed Present without Impact.** This species is assumed present in Huichica Creek. Project activity will be in upland areas 200 feet or greater from the stream centerline. Drilling will occur beneath Huichica Creek; frac-out is deemed unlikely by the drilling contractor.
Oncorhynchus tshawytscha Chinook salmon - California coastal ESU	FT	This ESU includes all naturally spawned populations of Chinook salmon from rivers and streams south of the Klamath River (exclusive) to the Russian River (inclusive). Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps great than 27 degrees Celsius are lethal to adults.	**Unlikely.** The Study Area does not contain suitable anadromous or estuarine waters.	**Presumed Absent.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Pogonichthys macrolepidotus Sacramento splittail	SSC	Formerly endemic to the lakes and rivers of the Central Valley, but now confined to the Sacramento Delta, Suisun Bay and associated marshes. Occurs in slow-moving river sections and dead-end sloughs. Requires flooded vegetation for spawning and foraging for young. A freshwater species, but tolerant of moderate salinity (10-18 parts per thousand).	**No Potential.** The Study Area does not contain riverine or estuarine waters.	**Not Present.** No further actions are recommended for this species.
Spirinchus thaleichthys longfin smelt	FC, ST, SSC	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15 to 30 ppt, but can be found in completely freshwater to almost pure seawater.	**No Potential.** The Study Area does not contain riverine or estuarine waters.	**Not Present.** No further actions are recommended for this species.
Invertebrates				
Branchinecta lynchi vernal pool fairy shrimp	FT	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**Moderate Potential.** The Study Area contains seasonal wetlands that may support this species.	**Presence Unknown.** Surveys have not been conducted for this species, nor are they recommended. The site's seasonal wetlands will be completely avoided by 225 feet or greater and project work will occur during the dry season.
Desmocerus californicus dimorphus valley elderberry longhorn beetle	FT	Known from the Central Valley and adjacent foothills, in riparian and oak savannah where elderberry (*Sambucus* sp.), the host plant, is present.	**No Potential.** Although elderberry was observed during the site visit, this species, as noted in the CNDDB, is restricted to its southeastern-most portion of Napa County (CDFW 2022a).	**Not Present.** No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RESULTS AND RECOMMENDATIONS
Speyeria callippe callippe Callippe silverspot butterfly	FE	Two populations are recognized, on San Bruno Mountain and the Cordelia Hills. Host plant is Johnny jump-up (*Viola pedunculata*), which is found on serpentine soils. Most adults found on east-facing slopes; males congregate on hilltops in search of females.	**No Potential.** Johnny jump-up is not present in the Study Area to support this species. Likewise, this species' known range with Napa County is restricted to the immediate vicinity of the Cordelia Hills.	**Not Present.** No further actions are recommended for this species.
Syncaris pacifica California freshwater shrimp	FE, SE	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from main stream flow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	**High Potential.** Huichica Creek is a perennial stream with documented occurrences of this species.	**Assumed Present without Impact.** This species is assumed present in Huichica Creek. Project activity will be in upland areas 200 feet or greater from the stream centerline. Drilling will occur beneath Huichica Creek; frac-out is deemed unlikely by the drilling contractor.

***Key to status codes:**

FC	Federal Candidate for Listing
FE	Federal Endangered
BGEPA	Bald and Golden Eagle Protection Act Species
FT	Federal Threatened
LR	Locally Rare as per Napa County Baseline Report
SC (E/T)	State Candidate for Listing (Endangered/Threatened)
SE	State Endangered
SFP	State Fully Protected Animal
SR	State Rare
SSC	State Species of Special Concern
ST	State Threatened
CRPR 1A	CNPS CRPR 1A: Plants presumed extinct in California
CRPR 1B	CNPS CRPR 1B: Plants rare, threatened or endangered in California and elsewhere
CRPR 2A	CNPS CRPR 2A: Plants presumed extirpated in California, but more common elsewhere
CRPR 2B	CNPS CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
CRPR 3	CNPS CRPR 3: Plants about which CNPS needs more information (a review list)
CRPR 4	CNPS CRPR 4: Plants of limited distribution (a watch list)
WBWG	Western Bat Working Group High or Medium-high Priority Species

Potential to Occur:

No Potential: Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Unlikely: Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

Moderate Potential: Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

High Potential: All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

Results and Recommendations:

Present: Species was observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.

Assumed Present: Species is assumed to be present on-site based on the presence of key habitat components.

Assumed Present without Impact: Species assumed present; however, project activities will not have an impact on the species.

Presumed Absent: Species is presumed to not be present due to a lack of key habitat components.

Not Present: Species is considered not present due to a clear lack of any suitable habitat and/or local range limitations.

Not Observed: Species was not observed during dedicated/formal surveys.

Presence Unknown: Species has the potential to be present, but no dedicated surveys to determine absence/presence were performed.

RECEIPT

NapaSan

1515 Soscol Ferry Road
Napa, California 94558
Phone: (707) 258-6000
www.napasan.com

2155 Ramal Rd

RW SERVICE LATERAL/COUNTY

Permit No: RWLAT-000191
Receipt No: NSD3345

Fee Description	Account	Fee Amount
PLAN CHECK FEES		
LOT WITH NO NEW SEWER MAINS - PER UNIT		$ 120.00
PRIVATE INSPECTION FEES		
RW INSPECTION		$ 212.00
RW CROSS-CONNECT INSPECTION		$ 250.00

Total Fees Paid: **$ 582.00**
Date Paid: 08/08/2022
Paid By: Edwards Engineering
Pay Method: CHECK 3657
Received By: Kimberly Perry

Customer

NAPA SANITATION DISTRICT

RWLAT-000191

Issued: August 08, 2022

PERMIT FOR PRIVATE RECYCLED WATER LATERAL

LCWD - CONSTELLATION WINES

Owner:	Site Address: 2155 Ramal Rd ,
Engineer: Edwards Engineering	Address: 1305 E Street NAPA, CA 94558
General Contractor:	Address: ,
Class A Contractor:	Address: ,
Plumber:	Address: ,
Applicant: Constellation Brands	Address: ,
Contact-Con:	Address: ,
Contact-Des	Address: ,
Designer:	Address: ,
Tenant:	Address: ,
Type of Application: RW SERVICE LATERAL	Annexation Fee: $ 0.00
Bond: $ 0.00	Plan Check Fee: $ 120.00
Subdivision:	Capacity Charge: $ 0.00
Lot:	Payback Fee: $ 0.00
Approved: 7/25/2022 By: Gavin Glascott	I/I Mitigation Fee: $ 0.00
Inspected: By:	Inspection of Sewers: Total:
Pay Method: CHECK	Private Lateral: 0 $0.00
Receipt Number: NSD3345 Check Number: 3657	Public Lateral: 0 $0.00
NSD Inspection Required	Mainline: 0 $0.00
	CREDITS: $0.00
	TOTAL PAID: $582.00

I hereby agree, if the foregoing Permit is issued, to all the provisions of the Napa Sanitation District's Sanitary Code and Amendments and agree that all the provisions thereto will be complied with whether herein specified or not. Applicant further agrees that in the event any change is made in the plans for the improvement covered by the permit herein above applied for, that applicant will immediately notify the District, in writing, of the proposed change and pay upon demand any additional charges required by the District regulations occasioned by the proposed change.

REPRESENTATIVE FOR APPLICANT: BY

Job Site Copy

NAPA SANITATION DISTRICT

RWLAT-000191
08/08/2022

1515 Soscol Ferry Road
Napa, CA 94558
(707) 258-6000

PERMIT FOR PRIVATE RECYCLED WATER LATERAL

TO: County of Napa

FROM: Napa Sanitation District

THIS IS TO CERTIFY THAT CONSTELLATION BRANDS,

HAS BEEN ISSUED A PERMIT TO INSTALL A PRIVATE RECYCLED WATER SERVICE LINE AT: 2155 RAMAL RD. TO THE PUBLIC SEWER SYSTEM.

THIS PERMIT IS GOOD FOR ONE YEAR AFTER ISSUANCE AND SHALL LAPSE IF OCCUPANCY PERMIT BY THE COUNTY OF NAPA IS NOT ISSUED BY 8/8/2023 . NEW FEES AT THE CURRENT RATE WOULD THEN BE DUE TO THE NAPA SANITATION DISTRICT, WITH CREDIT FOR FEES PREVIOUSLY PAID.

THIS PERMIT REQUIRES A FINAL INSPECTION FROM NAPA SANITATION DISTRICT

NAPA SANITATION DISTRICT

BY: Kimberly Perry

I HAVE READ AND UNDERSTAND SECTION 906 (A) AND (B) OF ORDINANCE 87, WHICH IS ON THE REVERSE SIDE OF THIS PERMIT, AND ACKNOWLEDGE ADDITIONAL FEES WILL BE PAID AT THE RATE IN EFFECT ONE YEAR FROM THIS DATE IF THE COUNTY OF NAPA HAS NOT ISSUED AN OCCUPANCY PERMIT FOR THE UNITS LISTED ABOVE.

CC: INSPECTION

Planning, Building & Environmental Services
1195 Third Street, Suite 210
Napa, CA 94559-3035
www.countyofnapa.org

Brian Bordona
Interim Director

A Tradition of Stewardship
A Commitment to Service

March 6, 2023

PPI Engineering
2800 Jefferson Street
Napa, CA 94558
mbueno@ppiengineering.com

Copy to property owner:
Constellation Brands Inc
PO Box 106
Oakville, CA 94582
Harinder.dhaliwal@cbrands.com

Sent via electronic mail only. No hard copy to follow.

Re: (FIRST) Plan review comments for: ENG23-00002
Project Description: Grading Reservoir
APN: 047-271-002-000

Dear Applicant,

Thank you for submitting a permit application for Napa County's review. This letter contains plan review comments from each concerned division in the Planning, Building & Environmental Services Department. The Department's goal is to provide you with one consolidated plan review comment letter. In most cases, re-submitted plans shall be reviewed within 14 days provided they are complete and revised as noted in the plan review comments. Re-submittals that have been substantially altered or re-designed shall be reviewed within 28 days. All resubmittals may incur additional plan review fees.

Re-submitted plans will not be routed for plan review until we have received complete and revised sets of grading and drainage plans to include all reports, attachments, calculations, permit resubmittal form, and any additional fees or deposits owed. We encourage digital submittals. During your initial submittal, you should have received a link with instructions on submitting to the PBES Engineering Digital Cloud. Please note that these digital links are project specific. If you do not have this link for the above named project or the link has stopped working, please contact the Engineering Division General Inbox at

Engineering@countyofnapa.org to obtain one. Please include a reference to the project number with all correspondence. Please submit a response letter addressing each of the plan review comments along with the revisions clouded on the plan set. Please be aware that this is an identification of information known to be necessary at this time to continue processing of your application. Further review of your project may necessitate the request for additional information, including supplemental reports. Plan review comments begin on the following page.

CURRENT PLAN REVIEW STATUS BY DIVISION.			
DIVISION	**REVIEW STATUS**	**REVIEWERS NAME**	**CONTACT INFO**
ENGINEERING	SEE COMMENTS	Daniel Hornett	Daniel.Hornett@countyofnapa.org
PLANNING	SEE COMMENTS	Pam Arifian	Pamela.arifian@countyofnapa.org

PLAN REVIEW COMMENTS BY DIVISION

ENGINEERING DIVISION COMMENTS:

1. Provide documentation of the permit with the Division of Safety of Dams
2. Provide WDID# when it is available.
3. Please provide hydrologic/hydraulic calculations for the overflow spillway

---

PLANNING DIVISION COMMENTS:

1. Please show 20-foot setback from the parcel line, pursuant to NCC Sections 18.104.010 and 18.104.260(A).
2. Since the development area is proposed on land with slopes over 10%, the project is not eligible for Categorical Exemption under State CEQA Guidelines Section 15304, and an Initial Study and Negative Declaration must be prepared pursuant to CEQA Guidelines Section 15070.

Effective Codes: All plans shall be designed under the effective codes: the latest California Building Code, National Pollutant Discharge Elimination System (NPDES) Water Quality Order No. 2013-0001- DWQ, the latest Napa County Road and Street Standards, and the current Napa County Code.

Processing: Upon completion of corrections, please submit digital sets of corrected plans, to the Napa County Permit Center. Thank you in advance for providing the above material. Please insure that all revised plans, reports, or other resubmitted documents are clearly marked "revised" and dated.

(First Review) ENG23-00002

Digital Resubmittal Instructions:

1. Please send an email with a copy of the completed application resubmittal form (attached to this letter) to our general division inbox at: Engineering@countyofnapa.org notifying staff of your intention to resubmit.

2. Once we receive the resubmittal form, Engineering staff will email you to confirm receipt of the form and will re-send the cloud link.

3. You may then upload all electronic files (resubmittal form, plans, reports, etc.) for our review.

4. We ask that you please name the files using SUB # (2, 3, etc) followed by the document type for ease of our reviewers (i.e. SUB 2_Plans).

5. Please submit any additional payments due to our main office. We are taking the payments in person at our front desk but you may also make the payment over the phone via credit card (707) 253-4417 or you may mail in a check. Please make sure to include a reference to the Napa County permit number with your payment.

6. Once the payment has been made and all documents uploaded to our cloud, please send another email to Engineering@countyofnapa.org informing us of your complete resubmittal.

7. After we receive confirmation of receipt of the plans and payment, we will send you a confirmation email and begin the review and processing of your resubmittal.

Approval: Upon approval of the plans by all reviewing divisions. Engineering staff will contact you and request at least TWO hard copies of the complete and revised sets of grading and drainage plans to include all reports, attachments, and calculations for stamping and permit issuance.

If you have any questions about this letter or other matters relating to your application, permitting staff can be reached at (707) 253-4417. For general review status please send an email to the reviewing engineer at: daniel.hornett@countyofnapa.org. Napa County handouts and forms can be found online at www.countyofnapa.org/PBES

Sincerely,

Daniel Hornett
Assistant Engineer
County of Napa | Engineering Division
Planning, Building & Environmental Services Department
1195 Third Street, 2nd Floor | Napa | CA | 94559
ph: **(707) 299-1358**
Email: daniel.hornett@countyofnapa.org

CONSTELLATION GRADING RESERVOIR

Response to March 6, 2023 County Plan Review Comments

ENG23-00002

ENGINEERING DIVISION COMMENTS:

1. Provide documentation of the permit with the Division of Safety of Dams

   The Division of Safety of Dams (DSOD) was consulted and on March 21, 2023 confirmed that the proposed agricultural reservoir is exempt from DSOD jurisdiction under Section 6004(a) of the California Water Code which states, *"…and a barrier that is not across a stream channel, watercourse, or natural drainage area and that has the principal purpose of impounding water for agricultural use shall not be considered a dam."*

2. Provide WDID# when it is available

   The WDID # is 2 49C400270. Sheet 1 of the plans have been updated to include the WDID # and the revised plans are included with this resubmittal package.

3. Please provide hydrologic/hydraulic calculations for the overflow spillway

   The hydrologic/hydraulic calculations have been included with this resubmittal package.

PLANNING DIVISION COMMENTS:

1. Please show 20-foot setback from the parcel line; pursuant to NCC Sections 18.104.010 and 18.104.260(A)

   The proposed reservoir was designed to maintain all required setbacks; the distance from the reservoir to the closest parcel line has been added to the revised plans (Sheet 1) included with this resubmittal package.

2. Since the development area is proposed on land with slopes over 10%, the project is not eligible for Categorical Exemption under State CEQA Guidelines Section 15304, and in Initial Study and Negative Declaration must be prepared pursuant to CEQA Guidelines Section 15070.

   Comment noted. We understand that a CEQA document is being prepared by Napa County.

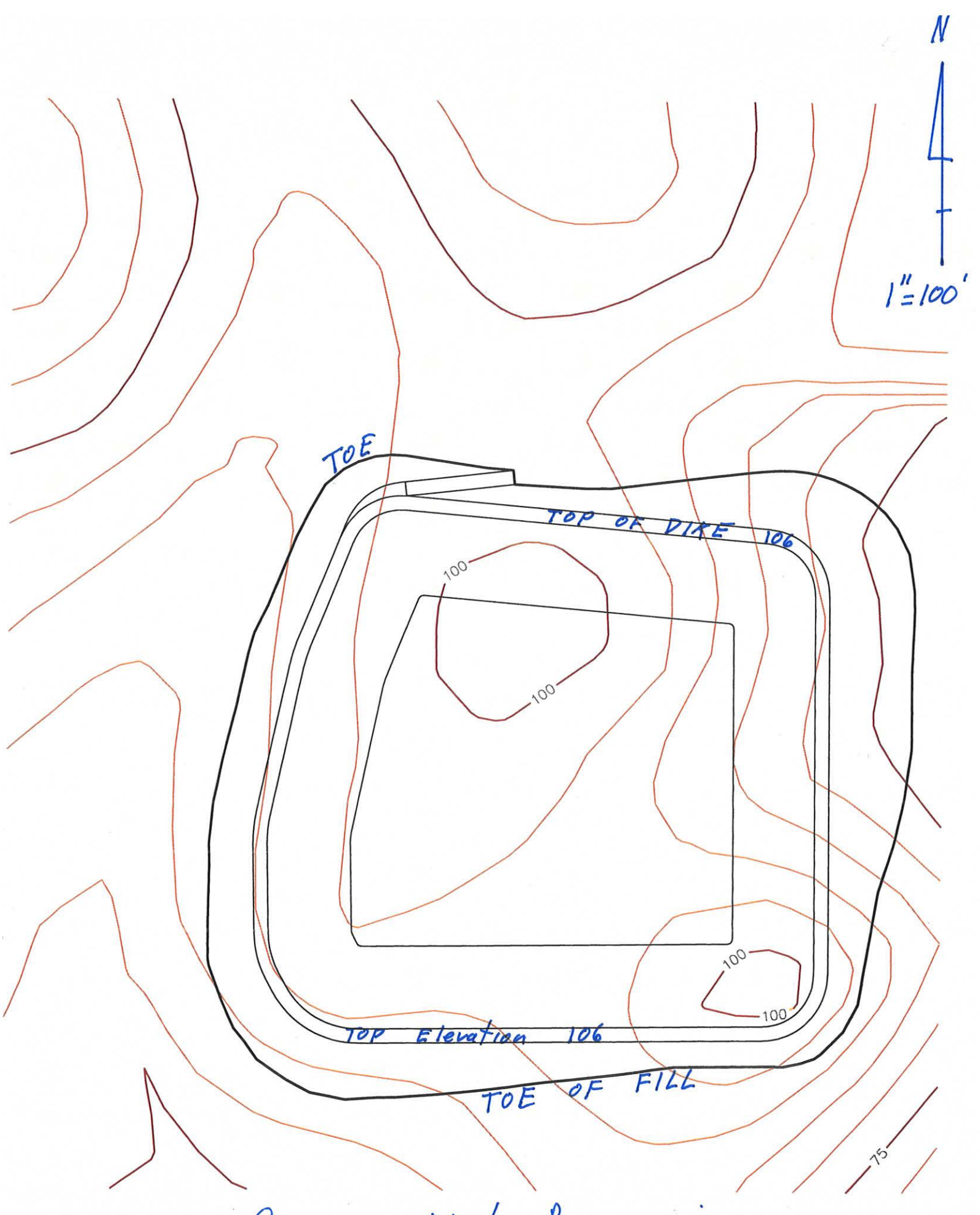
Jim Bushey

From: Holmes, Michelle@DWR <Michelle.Holmes@water.ca.gov>
Sent: Tuesday, March 21, 2023 12:04 PM
To: Jim Bushey
Subject: Proposed Impoundment
Attachments: 3.8.23 sketch to Lakhbir.pdf; Carneros Vista Reservoir Footprint.kmz

Hi Jim,

Your email regarding the attached proposed impoundment made its way to me. Based on what's attached, the proposed impoundment on top of the knoll and not across a drainage appears to be exempt from DSOD jurisdiction under section 6004(a) of the water code. Let me know if you have any additional questions.

Michelle Holmes, P.E.
Senior Engineer, Area 1
Division of Safety of Dams
Office: (916) 565-7814
Cell: (916) 806-1799



Carneros Vista Reservoir

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Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

Brian Bordona
Interim Director

Certified Mail

March 13, 2023

Jose Simon III, Chairperson
Middletown Rancheria
P.O. Box 1035
Middletown CA 95461

Re: Notification of Proposed Project Pursuant to Public Resources Code 21080.3.1
Constellation Brands Inc. Water Storage Reservoir Grading Plan #ENG23-00002-ECPA
2155 Ramal Road; APN 047-271-002

Dear Mr. Simon,

The Napa County Planning Division is processing a request for a Grading Permit to develop an approximate 75-acre-foot recycled water storage reservoir located at 2155 Ramal Road, Napa. The reservoir would be located approximately 0.3-mile west of the intersection of Las Amigas Road and Duhig Road on land that has been cultivated as a vineyard since before 1982. Additional information about the proposal can be viewed online at the Planning Division's current projects webpage https://www.countyofnapa.org/2876/Current-Projects-Explorer.

This letter serves as notification to the Middletown Rancheria that is traditionally and culturally affiliated with the geographic area of the proposed project pursuant to Public Resources Code 21080.3.1 (Assembly Bill 52 [Gatto]). If your tribe wishes to consult on this project, please contact me in writing, within 30 days of receipt of this letter, to request consultation.

If you should have any questions, please feel free to contact by telephone at 707-259-5934 or via email at pamela.arifian@countyofnapa.org.

Sincerely,

Pamela Arifian

Pam Arifian
Planner III

Enclosures: Cultural Resources Survey
Project plans

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Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

Brian Bordona
Interim Director

Certified Mail

March 13, 2023

Scott Gabaldon, Tribal Chair/Cultural Resources Manager
Mishewal Wappo Tribe of Alexander Valley
940 Larkfield Center
Santa Rosa, CA 95403

Re: Notification of Proposed Project Pursuant to Public Resources Code 21080.3.1
Constellation Brands Inc. Water Storage Reservoir Grading Plan #ENG23-00002-ECPA
2155 Ramal Road; APN 047-271-002

Dear Mr. Gabaldon,

The Napa County Planning Division is processing a request for a Grading Permit to develop an approximate 75-acre-foot recycled water storage reservoir located at 2155 Ramal Road, Napa. The reservoir would be located approximately 0.3-mile west of the intersection of Las Amigas Road and Duhig Road on land that has been cultivated as a vineyard since before 1982. Additional information about the proposal can be viewed online at the Planning Division's current projects webpage https://www.countyofnapa.org/2876/Current-Projects-Explorer.

This letter serves as notification to the Mishewal Wappo Tribe of Alexander Valley that is traditionally and culturally affiliated with the geographic area of the proposed project pursuant to Public Resources Code 21080.3.1 (Assembly Bill 52 [Gatto]). If your tribe wishes to consult on this project, please contact me in writing, within 30 days of receipt of this letter, to request consultation.

If you should have any questions, please feel free to contact by telephone at 707-259-5934 or via email at pamela.arifian@countyofnapa.org.

Sincerely,

Pamela Arifian

Pam Arifian
Planner III

Enclosures: Cultural Resources Survey
Project plans

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Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

Brian Bordona
Interim Director

Certified Mail

March 13, 2023

Laverne Bill, Interim Director of Cultural Resources
Yocha Dehe Wintun Nation
P.O. Box 18
Brooks, CA 95606

Re: Notification of Proposed Project Pursuant to Public Resources Code 21080.3.1
Constellation Brands Inc. Water Storage Reservoir Grading Plan #ENG23-00002-ECPA
2155 Ramal Road; APN 047-271-002

Dear Mr. Bill,

The Napa County Planning Division is processing a request for a Grading Permit to develop an approximate 75-acre-foot recycled water storage reservoir located at 2155 Ramal Road, Napa. The reservoir would be located approximately 0.3-mile west of the intersection of Las Amigas Road and Duhig Road on land that has been cultivated as a vineyard since before 1982. Additional information about the proposal can be viewed online at the Planning Division's current projects webpage https://www.countyofnapa.org/2876/Current-Projects-Explorer.

This letter serves as notification to the Yocha Dehe Wintun Nation that is traditionally and culturally affiliated with the geographic area of the proposed project pursuant to Public Resources Code 21080.3.1 (Assembly Bill 52 [Gatto]). If your tribe wishes to consult on this project, please contact me in writing, within 30 days of receipt of this letter, to request consultation.

If you should have any questions, please feel free to contact by telephone at 707-259-5934 or via email at pamela.arifian@countyofnapa.org.

Sincerely,

Pamela Arifian

Pam Arifian
Planner III

Enclosures: Archaeological Reconnaissance Survey
Project plans

YOCHA DEHE
CULTURAL RESOURCES

April 5, 2023

Napa County – Planning, Building & Environmental Services
Attn: Pam Arifian, Planner III
1195 Third Street., Suite 210
Napa, CA 94559

RE: 2155 Ramal Rd Napa Project YD-03172023-01

Dear Ms. Arifian:

Thank you for your project notification letter dated, March 13, 2023, regarding cultural information on or near the proposed 2155 Ramal Rd Napa Project. We appreciate your effort to contact us.

The Cultural Resources Department has reviewed the project and concluded that it is not within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, we respectively decline any comment on this project. However, based on the information provided, please defer correspondence to the following:

Federated Indians of Graton Rancheria
Attn: Tribal Historic Preservation Officer
6400 Redwood Drive, Suite 300
Rohnert Park, CA 94928

Mishewal Wappo Tribe of Alexander Valley
Attn: Scott Gadaldon
2275 Silk Road
Windsor, CA 95492

Please refer to identification number YD – 03172023-01 in any future correspondence with Yocha Dehe Wintun Nation concerning this project.

Thank you for providing us with this notice and the opportunity to comment.

Sincerely,

DocuSigned by:
Yvonne Perkins
8DD0BD089ED6438...

Tribal Historic Preservation Officer

cc: Federated Indians of Graton Rancheria; Mishewal Wappo Tribe of Alexander Valley

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A Commitment to Service

Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

David Morrison
Director

April 13, 2023

Laverne Bill, Interim Director of Cultural Resources
Yocha Dehe Wintun Nation
P.O. Box 18
Brooks, CA 95606

Re: Closed Status of Tribal Consultation Invitation
Pursuant to Public Resources Code 21080.3.1
Constellation Brands Inc. Water Storage Reservoir Grading Permit #ENG23-00002
2155 Ramal Road; APN 047-271-002

Dear Mr. Bill,

On March 13, 2023, the Napa County Planning Division mailed to you, via certified delivery, notification of an invitation to consult on a pending request for a Grading Permit to develop an approximate 75-acre-foot recycled water storage reservoir located at 2155 Ramal Road, Napa.

Thank you for your letter dated April 5, 2023 that stated the project is not within the aboriginal territories of the Tribe, and that the Tribe declines to comment on this project. The Planning Division has concluded that consultation proceedings with your organization will not be initiated for this proposal.

Thank you for your ongoing interest in development projects in Napa County. If you have any questions, please feel free to contact me by telephone at 707-259-5934 or via email at pamela.arifian@countyofnapa.org.

Sincerely,

Pamela Arifian
Planner III

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A Commitment to Service

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1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

Brian Bordona
Interim Director

April 13, 2023

Scott Gabaldon, Tribal Chair/Cultural Resources Manager
Mishewal Wappo Tribe of Alexander Valley
640 Larkfield Center
Santa Rosa, CA 94503

Re: Closed Status of Tribal Consultation Invitation
Pursuant to Public Resources Code 21080.3.1
Constellation Brands Inc. Water Storage Reservoir Grading Permit #ENG23-00002
2155 Ramal Road; APN 047-271-002

Dear Mr. Gabaldon,

On March 13, 2023, the Napa County Planning Division mailed to you, via certified delivery, notification of an invitation to consult on a pending request for a Grading Permit to develop an approximate 75-acre-foot recycled water storage reservoir located at 2155 Ramal Road, Napa.

More than 30 days have elapsed since your confirmed receipt of the Planning Division's letter of invitation to consult on this proposed project, and staff has not received from you a written response with a request for consultation. Therefore, the Planning Division has concluded that consultation proceedings with your organization will not be initiated for this proposal.

Thank you for your ongoing interest in development projects in Napa County. If you have any questions, please feel free to contact me by telephone at 707-259-5934 or via email at pamela.arifian@countyofnapa.org.

Sincerely,

Pamela Arifian
Planner III

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Napa, CA 94559
www.countyofnapa.org

Brian Bordona
Interim Director

April 13, 2023

Jose Simon III, Chairperson
Middletown Rancheria
P.O. Box 1035
Middletown CA 95461

Re: Closed Status of Tribal Consultation Invitation
Pursuant to Public Resources Code 21080.3.1
Constellation Brands Inc. Water Storage Reservoir Grading Permit #ENG23-00002
2155 Ramal Road; APN 047-271-002

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Thank you for your ongoing interest in development projects in Napa County. If you have any questions, please feel free to contact me by telephone at 707-259-5934 or via email at pamela.arifian@countyofnapa.org.

Sincerely,

Pamela Arifian
Planner III