California Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670-4599
916-358-2900
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director

SEP 25 2018
Date

Charles Palmer
Calaveras County Water District
PO Box 846
San Andreas, CA 95249

Dear Mr. Palmer:

Notification of Streambed Alteration
Notification No. 1600-2018-0179-R2
Ebbetts Pass Reach 1 Water Transmission Pipeline Project impacting unnamed drainages, tributaries to Angels Creek and San Domingo Creek

As the California Department of Fish and Wildlife (CDFW) explained in a previous letter to you dated June 27, 2018, CDFW had until September 24, 2018, 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 complete 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 in writing prior to September 24, 2018. 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.

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 Michael Shun, Environmental Scientist, at (916) 767-8444 or by email at michael.shun@wildlife.ca.gov.

Sincerely,

Jeff Drongesen
Environmental Program Manager

ec: Michael Shun, Environmental Scientist
michael.shun@wildlife.ca.gov

California Department of Fish and Wildlife Notification of Lake or Streambed Alteration Form 2023

Ebbetts Pass Reach 1 Water Transmission Pipeline Project

Calaveras County, California

Prepared For:

Calaveras County Water District

June 25, 2018

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

FOR DEPARTMENT USE ONLY				
Date Received	*Amount Received*	*Amount Due*	*Date Complete*	*Notification No.*
	$	*$*		
Assigned to:				

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

1. APPLICANT PROPOSING PROJECT

Name	Charles Palmer		
Business/Agency	Calaveras County Water District		
Mailing Address	P.O. Box 846 (for U.S. Mail) 120 Toma Court		
City, State, Zip	San Andreas, California 95249		
Telephone	209-754-3174	Fax	209-754-1120
Email	charlesp@ccwd.org		

2. CONTACT PERSON (*Complete only if different from applicant*)

Name	Alyse Yeager		
Street Address	2525 Warren Drive		
City, State, Zip	Rocklin, CA 95677		
Telephone	916-782-9100	Fax	916-782-9134
Email	ayeager@ecorpconsulting.com		

3. PROPERTY OWNER (*Complete only if different from applicant*)

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name		Ebbetts Pass Reach 1 Water Transmission Pipeline Project		
B. Agreement Term Requested		☑ Regular (*5 years or less*) ☐ Long-term (*greater than 5 years)*		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (*year*)	Ending (*year*)	Start Date (*month/day*)	End Date (*month/day*)	
2019	2020	May 1	November 30	200 per year

5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, E, or F is checked, complete the specified attachment.	
A.	☑ Standard *(Most construction projects, excluding the categories listed below)*
B.	☐ Gravel/Sand/Rock Extraction (*Attachment A*) *Mine I.D. Number:*_____
C.	☐ Timber Harvesting (*Attachment B*) *THP Number:* _____
D.	☐ Water Diversion/Extraction/Impoundment (*Attachment C*) *SWRCB Number:* _____
E.	☐ Routine Maintenance (*Attachment D*)
F.	☐ Cannabis Cultivation (*Attachment E*)
G.	☐ Department Grant Programs *Agreement Number:* _____
H.	☐ Master
I.	☐ Master Timber Operations

6. FEES

See the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. ***Note: The Department may not process this notification until the correct fee has been received.***

	A. Project	B. Project Cost	C. Project Fee
1	See Additional Pages		
2			
3			
4			
5			
6			
7			
8			
9			
10			
		D. Base Fee *(if applicable)*	
		E. TOTAL FEE*	$7,942.75

** Cash, check, and Visa or MasterCard payments are accepted.*

7. PRIOR NOTIFICATION AND ORDERS

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?

☐ Yes (*Provide the information below*) ☑ No

Applicant	Notification Number	Date

B. Is this notification being submitted in response to a court or administrative order or notice, or a notice of violation (NOV) issued by the Department?

☑ No ☐ Yes (*Enclose a copy of the order, notice, or NOV. If the applicant was directed to notify the Department verbally rather than in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.*)

☐ *Continued on additional page(s)*

8. PROJECT LOCATION

A. Address or description of project location.

(*Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway*)

See Additional Pages.

☑ *Continued on additional page(s)*

B. River, stream, or lake affected by the project.	unnamed jurisdictional features
C. What water body is the river, stream, or lake tributary to?	Angels Creek, San Domingo Creek
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?	☐ Yes ☑ No ☐ Unknown
E. County	Calaveras

F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Murphys, California	4	14E	24-27	
Stanislaus, California	4	15E	18, 19	

☐ *Continued on additional page(s)*

K. Meridian (*check one*) ☐ Humboldt ☑ Mt. Diablo ☐ San Bernardino

L. Assessor's Parcel Number(s)

See Additional Pages.

☑ *Continued on additional page(s)*

M. Coordinates (*If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)*			
Latitude/Longitude	*Latitude:* 38.179446	*Longitude:* -120.388656	
	☐ Degrees/Minutes/Seconds	☑ Decimal Degrees	☐ Decimal Minutes
UTM	*Easting:*	*Northing:*	☐ Zone 10 ☐ Zone 11
Datum used for Latitude/Longitude or UTM	☐ NAD 27	☑ NAD 83 or WGS 84	

9. PROJECT CATEGORY

WORK TYPE	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR-MAINTAIN-OPERATE EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	☐	☐	☐
Bank stabilization – rip-rap/retaining wall/gabion	☐	☐	☐
Boat dock/pier	☐	☐	☐
Boat ramp	☐	☐	☐
Bridge	☐	☐	☐
Channel clearing/vegetation management	☐	☐	☐
Culvert	☐	☐	☐
Debris basin	☐	☐	☐
Dam	☐	☐	☐
Filling of wetland, river, stream, or lake	☐	☐	☐
Geotechnical survey	☐	☐	☐
Habitat enhancement – revegetation/mitigation	☐	☐	☐
Levee	☐	☐	☐
Low water crossing	☐	☐	☐
Road/trail	☐	☐	☐
Sediment removal: pond, stream, or marina	☐	☐	☐
flood control	☐	☐	☐
Storm drain outfall structure	☐	☐	☐
Temporary stream crossing	☐	☐	☐
Utility crossing: horizontal directional drilling	☐	☐	☐
jack/bore	☐	☐	☐
open trench	☐	☑	☐
Water diversion without facility	☐	☐	☐
Water diversion with facility	☐	☐	☐
Other *(specify)*:	☐	☐	☐

10. PROJECT DESCRIPTION

A. Describe the project in detail. Include photographs of the project location and immediate surrounding area.

- Written description of all project activities with detailed step-by-step description of project implementation.
- 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 drafted, specify the purpose or use.
- Enclose 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/or activity, significant area features, stockpile areas, areas of temporary disturbance, and where the equipment/machinery will access the project area.

See Attached Pages.

☑ *Continued on additional page(s)*

B. Specify the equipment and machinery that will be used to complete the project.

The construction equipment needed for the Project includes excavators, backhoes, concrete saws, torches, and compactors.

☐ *Continued on additional page(s)*

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).	☑ Yes ☐ No (*Skip to box 11*)
D. Will the proposed project require work in the wetted portion of the channel?	☑ Yes (*Enclose a plan to divert water around work site*) ☐ No

11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

See Attached Pages.

☑ *Continued on additional page(s)*

B. Will the project affect any vegetation? ☑ Yes (*Complete the tables below*) ☐ No *(Include aerial photo with date supporting this determination)*

Vegetation Type	Temporary Impact	Permanent Impact
See attached pages.	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
See attached pages.		

☑ *Continued on additional page(s)*

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

☑ Yes *(List each species and/or describe the habitat below)* ☐ No ☐ Unknown

See Attached Pages.

☑ *Continued on additional page(s)*

D. Identify the source(s) of information that supports a “yes” or “no” answer above in Box 11.C.

Biological Resources Assessment for the proposed Project (Attachment C).

☑ *Continued on additional page(s)*

E. Has a biological study been completed for the project site?

☑ Yes (*Enclose the biological study*) ☐ No

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.

F. Has a hydrological study been completed for the project or project site?

☐ Yes (*Enclose the hydrological study*) ☑ No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

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

☑ Yes (*Enclose the mapped results*) ☐ No

Note: Check "yes" if fish and wildlife resources or waters of the state on the project site have been mapped or delineated. "'Wildlife' means and includes all wild animals, birds, plants, fish, amphibians, reptiles and related ecological communities, including the habitat upon which the wildlife depends." (Fish & G. Code, § 89.5.) If "yes" is checked, submit the mapping or delineation. If the mapping or delineation is in digital format (e.g., GIS shape files or KMZ), you must submit the information in this format for the Department to deem your notification complete. If "no" is checked, or the resolution of the mapping or delineation is insufficient, the Department may request mapping or delineation (in digital or non-digital format), or higher resolution mapping or delineation for the Department to deem the notification complete.

12. MEASURES TO PROTECT FISH, WILDIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

See Additional Pages.

☑ *Continued on additional page(s)*

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

See Additional Pages.

☑ *Continued on additional page(s)*

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

There are no compensation measures proposed to protect fish or wildlife resources, as no impacts to protected fish and wildlife are anticipated. However, several mitigation measures have been proposed, as recommended in the BRA (Attachment C). Pre-construction nesting bird surveys will be conducted prior to construction during the nesting season to avoid impacts to nesting birds. If active nests are found, a no-disturbance buffer would be established. A pre-construction clearance survey for special-status bats would also be conducted to avoid impact to special-status bats. If tree trimming, removal, or work under a native oak canopy is to occur, voluntary BMPs, in accordance with the Voluntary Oak Woodland Management Plan, would be implemented.

☐ *Continued on additional page(s)*

13. PERMITS

List any local, State, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

A. Clean Water Act Section 404 Permit ☑ Applied ☐ Issued

B. Clean Water Act Section 401 Water Quality Certification ☑ Applied ☐ Issued

C. CEQA Initial Study and Mitigated Negative Declaration ☑ Applied ☐ Issued

D. Unknown whether ☐ local, ☐ State, or ☐ federal permit is needed for the project. (*Check each box that applies*)

☑ *Continued on additional page(s)*

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA) and/or National Environmental Protection Act (NEPA)?

☑ Yes (*Check the box for each CEQA or NEPA document that has been prepared and enclose a copy of each.*)

☐ No (*Check the box for each CEQA or NEPA document listed below that will be or is being prepared.*)

☐ Notice of Exemption	☑ Mitigated Negative Declaration	☐ NEPA document (*type*):
☑ Initial Study	☐ Environmental Impact Report	
☐ Negative Declaration	☐ Notice of Determination *(Enclose)*	
☐ THP/ NTMP	☐ Mitigation, Monitoring, Reporting Plan	

B. State Clearinghouse Number (*if applicable*)	2018052043		
C. Has a CEQA lead agency been determined?	☑ Yes (*Complete boxes D, E, and F*)	☐ No (*Skip to box 14.G*)	
D. CEQA Lead Agency	Calaveras County Water District		
E. Contact Person	Charles Palmer	F. Telephone Number	209-754-3174

G. If the project described in this notification is not the "whole project" or action pursuant to CEQA, briefly describe the entire project (Cal. Code Regs., tit. 14, § 15378).

N/A. The project described in this notification is the whole project or action pursuant to CEQA.

☐ *Continued on additional page(s)*

H. Has a CEQA filing fee been paid pursuant to Fish and Game Code section 711.4?

☐ Yes (*Enclose proof of payment*) ☑ No (*Briefly explain below the reason a CEQA filing fee has not been paid)*

A Notice of Determination (NOD) has not yet been issued. A CEQA filing fee will be paid upon issuance of a NOD.

Note: If a CEQA filing fee is required, the Lake or Streambed Alteration Agreement may not be finalized until paid.

15. SITE INSPECTION

Check one box only.

☐ In the event the Department determines that a site inspection is necessary, I hereby authorize a Department 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 the Department such entry.

☑ I request the Department to first contact (*insert name*) Alyse Yeager at (*insert telephone number*) (916) 782-9100 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 the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

☑ Yes (Please enclose the information via digital media with the completed notification form)

☐ No

17. 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 understand that if any information in this notification is found to be untrue or incorrect, the Department 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 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 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 the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

Signature of Applicant or Applicant's Authorized Representative

7/1/18
Date

Charles Palmer, as District Engineer for the Calaveras County Water District
Print Name

State of California
Department of Fish and Wildlife
Notification of Lake or Streambed Alteration
Form 2023

Ebbetts Pass Reach 1 Water Transmission Pipeline Project

Additional Pages

6. FEES

There are twelve crossings of CDFW-regulated habitat within the Ebbetts Pass Reach 1 Water Transmission Pipeline Project that would be considered projects by CDFW's definition. Please see Table 1 below for a summary of these projects and their associated application fees.

Table 1. Project Fees

	A. Project	B. Project Cost	C. Project Fee
1	Trenching ID-4 for water line installment	$2,500.00	$577.25
2	Trenching ID-2/ED-7 for water line installment	$2,500.00	$577.25
3	Trenching ED-6 for water line installment	$2,500.00	$577.25
4	Trenching DITCH-3 for water line installment	$4,500.00	$577.25
5	Trenching ED-3a/3b for water line installment	$8,500.00	$724.25
6	Trenching DITCH-4, DITCH-5, and SWS-2 for water line installment	$22,000.00	$1,446.00
7	Trenching DITCH-2 for water line installment	$4,500.00	$577.25
8	Trenching ED-2 for water line installment	$2,500.00	$577.25
9	Trenching ED-4 for water line installment	$2,500.00	$577.25
10	Trenching ED-1 for water line installment	$3,500.00	$577.25
11	Trenching ED-5 for water line installment	$2,500.00	$577.25
12	Trenching ID-3 for water line installment	$2,500.00	$577.25
		D. Base Fee *(if applicable)*	
		E. TOTAL FEE*	**$7,942.75**

8. PROJECT LOCATION

8A. Address or description of project location

The Ebbetts Pass Reach 1 Water Transmission Pipeline Project (Project) is a ±25.1-acre alignment that starts at the water plant at Hunter Dam Road, continues westerly along State Route (SR) 4 through Hathaway Pines, Red Apple Ranch and ends approximately 6,000 feet downhill from the entrance of Forest Meadows. The site corresponds to a portion of Sections 24, 25, 26, and 27, Township 4 North, and Range 14 East and Sections 18 and 19, Township 4 North, Range 15 East (Mount Diablo Base and Meridian) of the "Murphys, California" and "Stanislaus, California" 7.5-minute quadrangles (U.S. Geological Survey [USGS] 2001a, b, Figure 1. *Project Location and Vicinity*). The approximate center of the site is located at 38.179446° North (NAD83) and -120.388656° West (NAD83) within the Upper Calaveras California Watershed (Hydrologic Unit Code #18040011) and Upper Stanislaus Watershed (HUC#18040010) (Natural Resources Conservation Service, USGS, and U.S. Environmental Protection Agency 2016).

To travel to the site from Sacramento, take SR-99 south toward Stockton. Take the South Golden Gate Avenue/SR-4 exit. Turn left on South Golden Gate Avenue/SR-4 and continue for approximately 57.5 miles. Project site begins near the intersection of SR-4 and Dozer Line. Project site occurs to the south of SR-4.

8L. Assessor's Parcel Number(s)

30002007	30010037	30013035	34006018	34007010	34009005	34018026
30005001	30010042	30039001	34006020	34007011	34009ROW	34018032
30005010	30010045	30039002	34006021	34007012	34010008	34018034
30005ROW	30010054	34001035	34006025	34007016	34010009	34018035
30006001	30010055	34004031	34006026	34007ROW	34010010	34018ROW
30006002	30010056	34004050	34006028	34008014	34010ROW	34040001
30006003	30010057	34004054	34006030	34008016	34014ROW	34040020
30006005	30010058	34004055	34006040	34008017	34015017	34040025
30006017	30010ROW	34004056	34006049	34008018	34015ROW	34071020
30009001	30011008	34004057	34006ROW	34008019	34016ROW	
30009002	30011009	34004068	34007005	34008021	34017008	
30010007	30012013	34006002	34007007	34008ROW	34017ROW	

10. PROJECT DESCRIPTION

Project Purpose

The purpose of this Project is to replace an existing eight-inch-diameter water transmission pipeline. The pipeline will be replaced due to its age, poor condition and need for frequent repairs. All construction of the new pipeline will be performed in conformance with the most current industry standards including National Science Foundation 60/61, American Water Works Association (AWWA) and State of California

Waterworks standards assuring the public health and safety. The pipeline will be used for the transmission of potable water for domestic use as well as supply fire flow for communities along SR-4. The new pipeline will be fully disinfected and pass bacteriological tests before sections of new piping are placed into service.

Project Components

The Calaveras County Water District (CCWD) proposes to replace an existing water transmission pipeline and associated facilities (pressure reducing valve [PRV] stations, air relief valves, blow-off valves, main line valves, and fire hydrants). Conceptual engineering plans are provided in Attachment A. The existing eight-inch-diameter Ebbetts Pass Reach 1 pipeline is owned and operated by the CCWD. The existing pipeline was constructed in 1965 and delivers water treated from the District's Hunter Dam Water Treatment Plant to CCWD customers located along the SR-4 corridor from Avery, south and west, to services located approximately 4,000 feet west of Forest Meadows Drive.

Pipeline

The existing pipeline requires replacement due to age, poor condition and need for frequent repairs. Approximately 24,000 linear feet of new 6- or 12-inch-diameter ductile iron pipe will be used to replace the existing pipeline. The Project construction will be sequenced such that existing CCWD customers will not be subjected to unusual or prolonged service outages with the placement of the proposed Project.

The pipeline is typically installed in approximately a 30-inch-wide trench with 36 to 48-inches of cover over the top of the pipe. The trench is 5 - 6 feet deep on average, but the depth varies and can be as much as 7 - 10 feet deep in some locations. The new pipeline may be located near the top of slope, near the toe of slope or near the existing SR-4 road shoulder. Underground Pacific Gas and Electric (PG&E) power improvements are also located parallel to the existing pipeline between Commercial Way and Darby Russel Road. Ideally, the new pipeline will be placed between the existing pipeline and existing underground PG&E power trench. Where this is not possible, the new pipeline will be placed between the existing pipeline and the SR-4 shoulder. If it cannot be avoided, the worst case is that existing pipeline will have to be excavated and removed on some sections of the Project so the new pipeline can be installed in the exact same location.

Where existing pipeline that crosses SR-4 need to be replaced, the pipeline will be replaced with bore-and-case construction, which does not require open cut construction across SR-4. In a few cases, there are existing service connections within the Project area that are provided without PRV stations and are typically located in the upper elevations of the Project.

Pressure Reducing Valve Stations

The existing and proposed pipeline will operate at pressures up to 250 pounds per square inch gauge (psig)[1]. Per CCWD's Standards, pressures delivered to CCWD customers should not exceed a maximum of 120 psig and ideally should be around 50 - 70 psig for household use. To reduce water pressures delivered to their customers, CCWD has installed 12 PRV stations within the proposed Project area. PRVs consist of a large buried concrete vault approximately 7-x-9-foot plan dimensions by 6 feet deep and the various pressure control valves, surge relief valves and isolation valves are placed inside this vault. The existing PRV station located near the intersection of Tahoe Drive and SR-4 has recently been constructed and will not be replaced with the proposed Project improvements. The PRV stations serving Red Apple Ranch subdivision at Rome Court and Red Apple Drive are recent additions and will also be reused. The remaining PRV stations located within the proposed Project will likely be replaced or relocated as part of the scope of improvements.

Fire Hydrants and Pipeline Valves

Existing fire hydrants along SR-4 now served directly by the existing pipeline will be removed and new hydrants will be installed and connected to the replacement pipeline. Additional hydrants may also be placed with the new pipeline.

Air relief valves will be placed at all high spots in the elevation of the pipeline where any air accumulating in the pipeline may collect and be vented. These valves also vent air during filling and draining of the pipeline, such as during construction or subsequent draining for maintenance or repair of the pipeline. Most of the air relief valve assembly is buried underground with only vent pipe and small insulating cover typically extending approximately 18 inches above ground.

There are currently blow-off valves at isolated low points along the existing pipeline route. The blow-off valves are placed at low points along the pipeline alignment for long term maintenance to be able to drain the line in the case of an emergency repair. These will be removed and replaced with current CCWD blow-off standards and reconnected to the new pipeline.

Existing main line valves located along the pipeline will also be replaced with the new pipeline improvements. Additional main line valves will be placed to provide for better maintenance and isolation and the valves will be utilized in the event of a future water leak/repair. The valves are typically resilient seat gate valves in accordance with applicable AWWA industry standards for water systems.

[1] PSI and PSIG are both units of measurement for describing the amount of pressure a gas or fluid is exerting. However, PSIG specifies to what the measurement is relative, whereas PSI does not. In both units, the letters "psi" is an abbreviation for "pounds per square inch. PSIG stands for "pounds per square inch gauge," or gage. PSIG units are relative to atmospheric pressure (Reference 2017).

Temporary Staging/Laydown Areas

The proposed Project includes up to five staging/laydown areas along the pipeline route. These areas may temporarily stage equipment and materials in the designated work zones as necessary to perform daily work. Also, up to two of the staging areas would be used for the construction trailer, parking equipment and vehicles, storing materials, storage containers, etc. All potential staging areas have been included in the proposed Project area identified in Figures 1 and 2.

11. PROJECT IMPACTS

11A. Impacts to bed, bank, and channel

Project Conditions

Project conditions were identified within a 25.1-acre area. The Project area is located within mountainous terrain situated at an elevational range of approximately 2,900 to 3,350 feet above mean sea level. Representative site photographs are provided in Attachment B.

The Project area is primarily composed of portions of a two-lane roadway (SR 4) and roadside habitat. The roadsides are a mixture of ruderal and undeveloped to developed land. Vegetation communities found within the ruderal and undeveloped portions of the Project area include annual forb meadow, annual grassland, ponderosa pine forest, and California black oak forest (Attachment C - Biological Resources Assessment).

The annual forb meadow and annual grassland are located at isolated patches within the Project area. The dominant plants found in the annual forb meadow community include Ramm's madia (*Jensia rammii*), white-tipped clover (*Trifolium variegatum*), white meadowfoam (*Limnanthes alba* ssp. *alba*), Spanish lotus (*Acmispon americanus*), soft brome (*Bromus hordeaceus*), and medusahead grass (*Elymus caput-medusae*). The dominant plants found in the annual grassland include medusahead grass, soft brome, ripgut brome (*Bromus diandrus*), hairy vetch (*Vicia hirsuta*), and dwarf sack clover (*Trifolium depauperatum*).

The ponderosa pine forest is the dominant vegetation community within the Project area. The ponderosa pine forest is made up of an open-to-dense canopy of ponderosa pine (*Pinus ponderosa*), incense cedar (*Calocedrus decurrens*), sugar pine (*Pinus lambertiana*), and black oak (*Quercus kelloggii*), with an understory of mountain misery (*Chamaebatia foliolosa*) and whiteleaf manzanita (*Arctostaphylos viscida*). The ponderosa pine forest is intermixed in some locations with California black oak forest vegetation community. The California black oak forest community is made up of an open canopy of black oak and Oregon oak (*Quercus garryana*), with an understory of mountain mahogany (*Cercocarpus betuloides*), pink honeysuckle (*Lonicera hispidula*), and buck brush (*Ceanothus cuneatus*).

Impacts to California Department of Fish and Wildlife (CDFW) Habitat Types

A total of 0.184 acre of Waters of the U.S. has been mapped within the Project survey area. Based on hydrologic connectivity to CDFW habitat and potential contributions to aquatic wildlife habitat, 0.117 acre of this total would be considered CDFW-regulated habitat. CDFW habitats mapped included seasonal

wetland swales, ditches, ephemeral drainages, and intermittent drainages. In total, 0.117 acre or 1,124 linear feet of these waters will be temporarily impacted by the pipeline replacement (Figure 2. *Temporary Impacts*; Table 2).

Table 2. Temporary Impacts to CDFW Habitat

Feature Type	Area (acres)	Length (linear feet)
Seasonal Wetland Swale	0.045	155
Intermittent Drainage	0.013	118
Ephemeral Drainage	0.021	348
Ditch	0.037	503
Total Waters:	0.117	1,124

Temporary impacts on waters include disturbance from vegetation removal (including tree removal), dewatering, recontouring the banks of drainages, equipment and crew access during construction, and removal of the existing pipeline. To access and remove the existing pipeline as well as recontour the existing channels, temporary coffer dams are anticipated to be installed within the onsite channels.

11B. Impacts to Vegetation

The Project will result in temporary impacts on annual forb meadow, ponderosa pine forest and California black oak forest communities due to disturbance from vegetation removal (including tree removal, described below), dewatering equipment and crew access during construction, removal of the pipeline, and ground disturbing activities. The Project will not result in permanent impacts to riparian habitat.

The Project may encroach on or impact native tree species to facilitate the construction of the Project. Further details regarding specific tree sizes and conditions within the surveyed area can be found in the tree inventory in Attachment D. The proposed Project would not affect oak woodlands, but a total of 131 native trees (including eight black oaks) would potentially be impacted by the proposed Project (Table 3).

Table 3. Trees Proposed for Removal

Tree Species	Number of Trees with potential impacts/removal	Trunk Diameter (range in inches)
Black oak (*Quercus kelloggii*)	8	7-18
California black walnut (*Juglans californica*)	1	27
Foothill pine (*Pinus sabiniana)*	1	14
Incense cedar (*Calocedrus decurrens*)	49	4-33
Ponderosa pine (*Pinus ponderosa*)	62	4-50
Redbud (*Cercis canadensis*)	1	20

Table 3. Trees Proposed for Removal

Tree Species	Number of Trees with potential impacts/removal	Trunk Diameter (range in inches)
Sugar pine (*Pinus lambertiana*)	6	5-8
Pine sp.	1	11
Pine sp.	1	15
Cedar sp.	1	8
TOTAL:	131	4-50

If tree trimming, removal or work under a native oak canopy is required for installation of the pipeline, appropriate, voluntary best management practices (BMPs), as discussed in the Calavera County Voluntary Oak Woodland Management Plan, will be implemented. Preconstruction nesting bird surveys will be conducted prior to tree removal if trees are to be removed during the nesting season (February 1 to August 31).

11C Impacts to Special-Status Species

To determine potential impacts to special-status species from the Project, a Biological Resources Assessment (BRA) was prepared for the Project (Attachment C). In support of the study, the following searches were conducted

- Records search of CDFW California Natural Diversity Database (CDFW 2017) within five miles of the Project area;
- U.S. Fish and Wildlife Service (USFWS) species list for the Project; and
- Nine-quad California Native Plant Society (CNPS 2017) search, consisting of the "Murphys, California" and "Stanislaus, California" 7.5-minute quadrangles and the 10 surrounding USGS quadrangles.

These searches identified several special-status plants and animals with potential to occur within the Project area. All species are evaluated in the attached BRA. Details on these species, the likelihood of these species occurring within the Project area, and the likelihood of these species being affected by the Project are discussed in the BRA (Table 3 of Attachment C).

Special-Status Plants

A special-status plant survey was conducted in accordance with guidelines promulgated by USFWS (USFWS 2000), California Department of Fish and Game (CDFG 1983), and CNPS (2001). The determinate-level field survey was conducted on June 15 and 16, and July 12 and 13, 2017, which coincided with the optimum blooming period for each of the target species. Yellow-lip pansy monkeyflower (*Diplacus pulchellus*) was the only special-status plant species observed within the Project area during the

determinate-level field survey. Results of the special-status plant survey are included in the BRA (Attachment C). Due to the presence of the species during surveys, the Project had potential to impact yellow-lip pansy monkeyflower; however, the pipeline alignment was changed to ensure complete avoidance of the identified populations.

11G. HAVE FISH OR WILDLIFE RESOURCES OR WATERS OF THE STATE BEEN MAPPED OR DELINEATED ON THE PROJECT SITE?

An Aquatic Resources Delineation Map is provided as Figure 3.

12. MEASURES TO PROTECT FISH, WILDIFE, AND PLANT RESOURCES

12A. Techniques to Prevent Sediment Discharge to Watercourses

This Project has been designed to include the smallest footprint practicable to minimize temporary and avoid permanent impacts to waters. No permanent impacts to waters are proposed, and all temporarily impacted waters will be restored to pre-construction contours and re-vegetated. All impacts have been minimized by replacing an existing pipeline at approximately the same location. The following avoidance and minimization efforts will further reduce the potential impacts to these waters:

- Implementation of BMPs, including but not limited to: minimizing soil disturbance, inlet protection, stabilized construction access, covering of exposed areas with mulch, use of construction mats, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation or permanent seeding, and preservation of existing vegetation will be used to control sedimentation and erosion. These measures would be developed in a Project-specific erosion control plan.
- Environmentally sensitive area fencing shall be used to delineate the Project boundaries to prevent encroachment of construction personnel and equipment into adjacent waters and wetlands.
- Disturbed areas will be reseeded with an agency-approved native seed mixture.
- An Environmental Monitor will be on site to ensure implementation of these measures during construction.

Unavoidable impacts to wetland vegetation during construction will also require consultation with other appropriate jurisdictions (U.S. Army Corps of Engineers and Central Valley Regional Water Quality Control Board) and acquisition of permits (404, 401, respectively). All permit conditions will be followed.

12B. Avoidance and Minimization of Impacts to Fish, Wildlife, and Plant Resources

The Project is designed to minimize impacts to fish, wildlife, and plants to the greatest extent practicable. By installing the new pipeline in approximately the same location as the existing pipeline, potential impacts to waters and plant populations have been reduced. Upon discovery of yellow-lip pansy

monkeyflower populations near each end of the original Project alignment, the alignment was shifted to avoid and minimize potential impacts to the species.

As recommended in the BRA (Attachment C), pre-construction nesting bird surveys will be conducted prior to construction during the nesting season to avoid impacts to nesting birds. If active nests are found, a no-disturbance buffer would be established. A pre-construction clearance survey for special-status bats would also be conducted to avoid impact to special-status bats.

If tree trimming, removal, or work under a native oak canopy is to occur, voluntary BMPs, in accordance with the Voluntary Oak Woodland Management Plan, would be implemented.

Migratory Bird Treaty Act Surveys and Avoidance

Bird species protected by the Migratory Bird Treaty Act have the potential to occur within the biological study area. If construction activities are to occur between February 15 and September 1, pre-construction surveys for migratory birds shall be conducted by a qualified biologist 14 days prior to the start of construction. If nesting birds are found within or adjacent to the Project area, appropriate temporal restrictions and/or buffer areas will be established by the biologist.

13. PERMITS

Federal Clean Water Act, Section 404 Nationwide Permit No. 12

A request for authorization under Section 404 Nationwide No. 12 will be sent to the USACE concurrently with this application (Attachment E).

Federal Clean Water Act, Section 401

A request for a Section 401 Water Quality Act Certification will be sent to the RWQCB concurrently with this application (Attachment F).

California Environmental Quality Act

An Initial Study and Mitigated Negative Declaration (IS/MND) has been prepared for the Project (Attachment G).

REFERENCES

California Department of Fish and Game (CDFG). 1983 (revised 2000). Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities (Revised 2000). The Resources Agency, Sacramento, CA.

California Department of Fish and Wildlife (CDFW). 2017. Rarefind 5. Online Version, commercial version. California Natural Diversity Database. The Resources Agency, Sacramento. Accessed May 2017.

California Native Plant Society (CNPS). 2001. Botanical Survey Guidelines. Sacramento, CA. Accessed May 2017.

_____. 2017. Inventory of Rare and Endangered Plants in California (online edition, v8-03 0.39). California Native Plant Society. Sacramento, CA. Available online: http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi. Accessed May 2017.

Natural Resources Conservation Service, USGS, U.S. Environmental Protection Agency. 2016. Watershed Boundary Dataset for California. http://datagateway.nrcs.usda.gov.

U.S. Fish and Wildlife Service (USFWS). 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants. United States Department of the Interior, USFWS. Sacramento, California.

U.S. Geological Survey (USGS). 1948a. "Murphys, California" 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.

_____. 1948b. "Stanislaus, California" 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.

LIST OF FIGURES

Project Boundary - 25.2 acres

Calaveras County, California
§24, 25, 26, and 27, T.04N, R.14E, and
§18 and 19, T.04N, R.15E MDBM
Latitude (NAD83): 38.179446°
Longitude (NAD83): -120.388656°
Watershed: Upper Calaveras California (18040011) and Upper Stanislaus (18040010)

Scale in Feet
0 2,000

Murphys (2001, NAD27) and Stanislaus (2001, NAD27)
CA 7.5-minute Topographic Quadrangles
US Geological Survey.

Map Date: 3/22/2018

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Location: N:\2017\2017-108 CCWD Ebbetts Pass\MAPS\Location Vicinity\CCWDEP_LnV_20180507.mxd (MRG) JSwagel 5/8/2018

Figure 1. Project Location and Vicinity

2017-108 CCWD Ebbetts Pass

Figure 2.1. Temporary Impacts[1]
Sheet 1 of 10

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

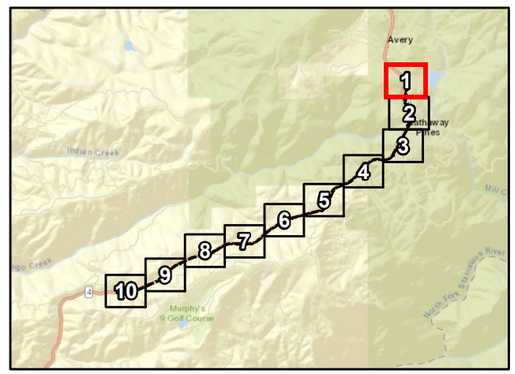
Project A Waters Impacts (0.011 acres)

- Intermittent Drainage (0.011 acres)

Project Components

- Water Main
- Existing Water Line (to be left in place)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*
** The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.*



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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary and Design Source: KASL (20180418)
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 5/8/2018

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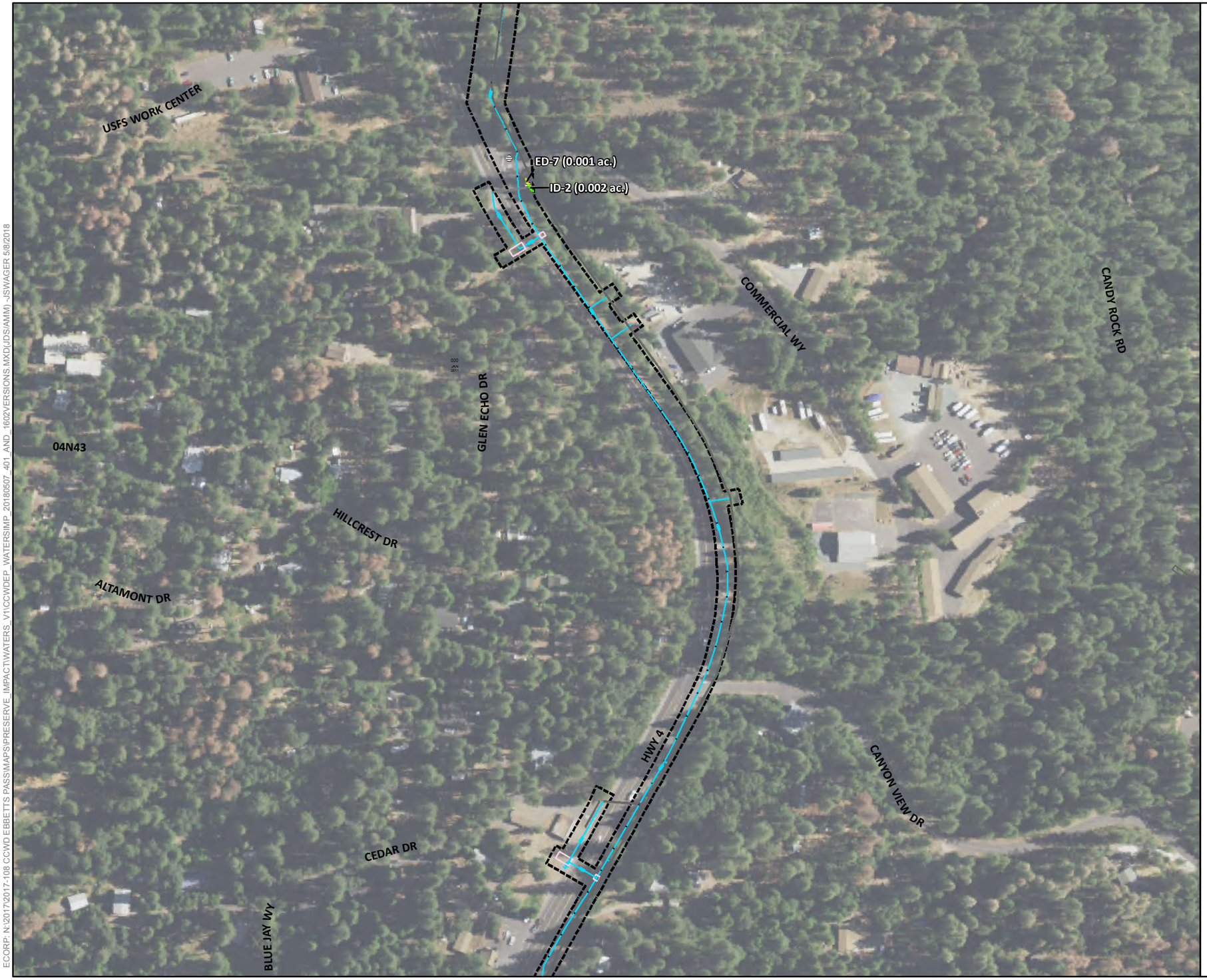
Figure 2.2. Temporary Impacts[1]
Sheet 2 of 10



Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Project B Waters Impacts * (0.002 acres)

- Intermittent Drainage (0.002 acres)
- Ephemeral Drainage (0.001 acres)

Project Components

- Water Main
- Bore Pit
- Existing Water Line (to be left in place)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*

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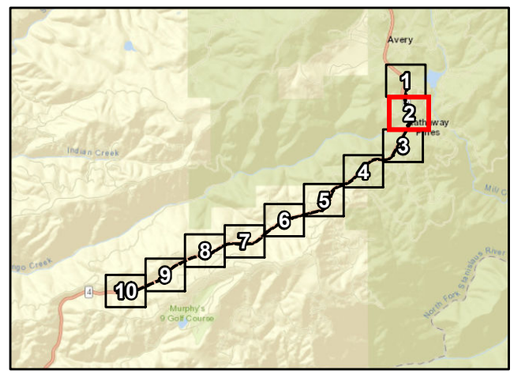

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary and Design Source: KASL (20180418)
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 5/8/2018

Figure 2.3. Temporary Impacts[1]
Sheet 3 of 10

CEDAR DR

BLUE JAY WY

38.190612/
-120.365814

HWY 4

38.187444/
-120.367594

SILVER SADDLE CT

STAMPEDE CANYON DR

CAMPFIRE CT

ED-6 (0.001 ac.)
38.186733/
-120.369028

SILVER SADDLE DR

OXBOW CT

HORSESHOE DR

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Project C Waters Impacts (0.001 acres)

- Ephemeral Drainage (0.001 acres)

Project Components

- Water Main
- Existing Water Line (to be left in place)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*
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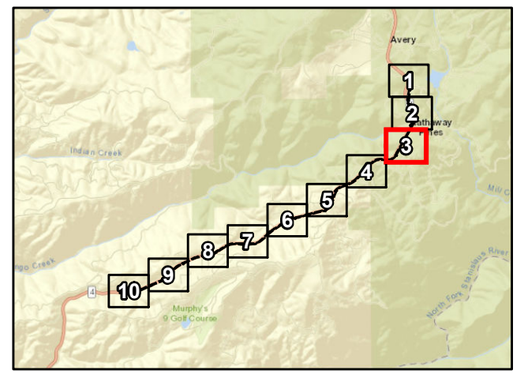

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary and Design Source: KASL (20180418)
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 5/8/2018

Figure 2.4. Temporary Impacts[1]
Sheet 4 of 10

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Project D Waters Impacts (0.005 acres)

- Ditch (0.005 acres)

Project Components

- Water Main
- Existing Water Line (to be left in place)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*
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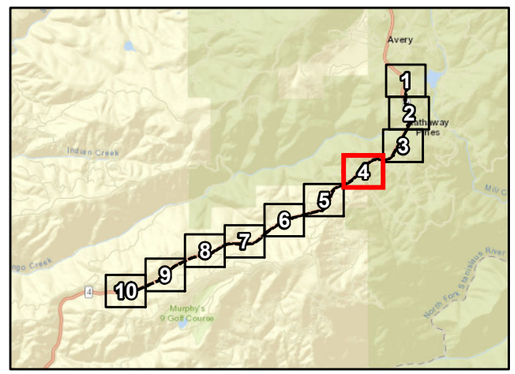

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary and Design Source: KASL (20180418)
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 5/8/2018

Figure 2.5. Temporary Impacts[1]
Sheet 5 of 10

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Project E Waters Impacts * (0.091 acres)

- Seasonal Wetland Swale (0.045 acres)
- Ephemeral Drainage (0.014 acres)
- Ditch (0.032 acres)

Project Components

- Water Main
- Existing Water Line (to be left in place)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*
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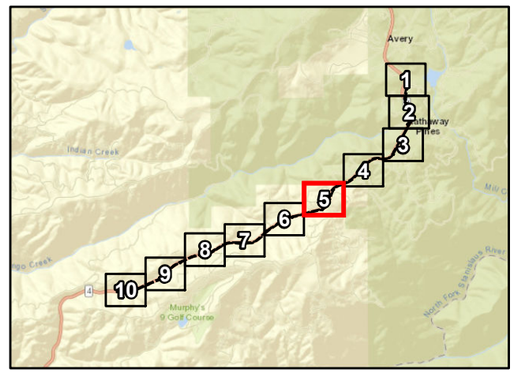

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2017-108 CCWD Ebbetts Pass

Scale in Feet
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Photo Source: NAIP, 2016
Boundary and Design Source: KASL (20180418)
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 5/8/2018

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Figure 2.6. Temporary Impacts[1]
Sheet 6 of 10

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Project F Waters Impacts (0.002 acres)

- Ephemeral Drainage (0.002 acres)

Project Components

- Water Main
- Bore Pit
- Existing Water Line (to be left in place)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*
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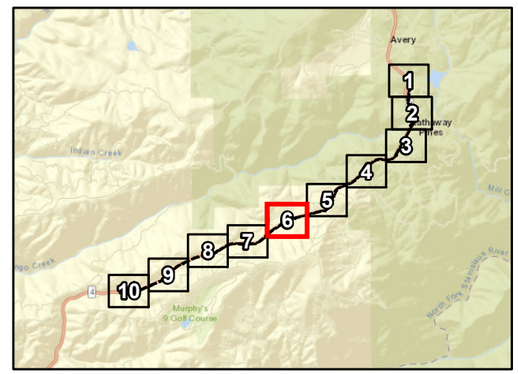

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary and Design Source: KASL (20180418)
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 5/8/2018

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Figure 2.7. Temporary Impacts[1]
Sheet 7 of 10

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Project Components

- Water Main
- Existing Water Line (to be left in place)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*
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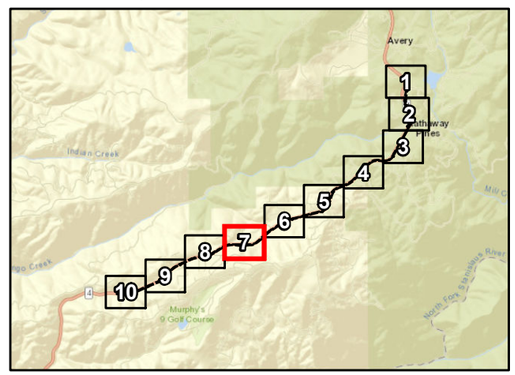

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary and Design Source: KASL (20180418)
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 5/8/2018

Figure 2.8. Temporary Impacts[1]
Sheet 8 of 10

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Project G Waters Impacts (0.060 acres)

- Seep (0.060 acres)

Project Components

- Water Main
- Bore Pit
- Existing Water Line (to be left in place)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*
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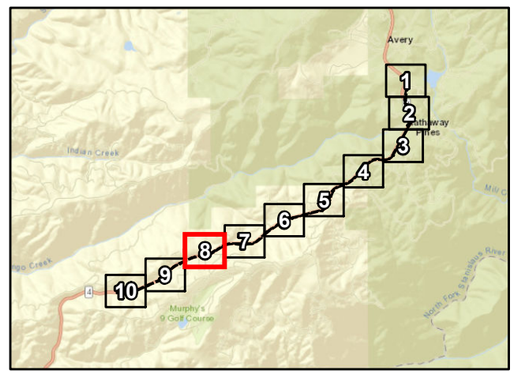

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary and Design Source: KASL (20180418)
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 5/8/2018

Figure 2.9. Temporary Impacts[1]
Sheet 9 of 10

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Project H Waters Impacts (0.0004 acres)

- Ephemeral Drainage (0.0004 acres)

Project Components

- Water Main
- Existing Water Line (to be left in place)

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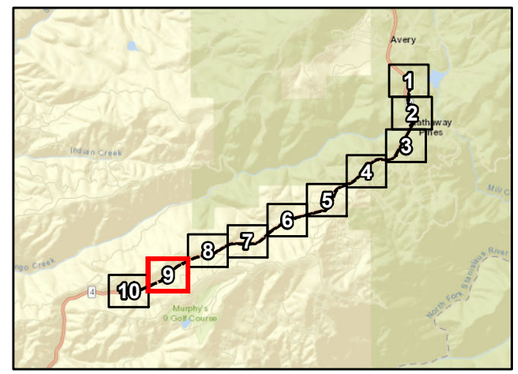

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary and Design Source: KASL (20180418)
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 5/8/2018

Figure 2.10. Temporary Impacts[1]
Sheet 10 of 10

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Project I Waters Impacts * (0.011 acres)

- Intermittent Drainage (0.001 acres)
- Ephemeral Drainage (0.003 acres)
- Ditch (0.008 acres)

Project Components

- Water Main
- Existing Water Line (to be left in place)
- Storm Drain

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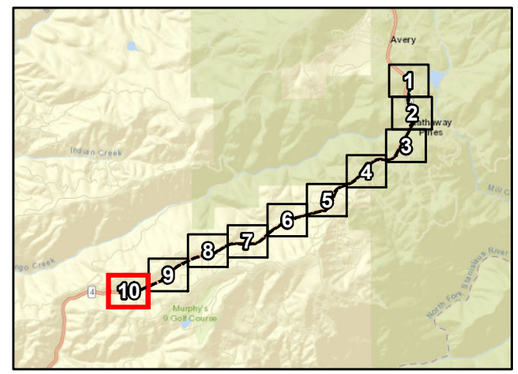

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary and Design Source: KASL (20180418)
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 5/8/2018

Figure 3.1.
Aquatic Resources Delineation [1]
(Sheet 1 of 10)

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Three Criteria Sample Points

- Upland Point
- Waters Point

Waters of the U.S. Total (0.185 acres) [1] *

Wetlands Total (0.105 acres)

- Seasonal Wetland Swale (0.045 acres)
- Seep (0.060 acres)

Other Waters Total (0.079 acres)

- Intermittent Drainage (0.013 acres)
- Ephemeral Drainage (0.021 acres)
- Ditch (0.045 acres)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*

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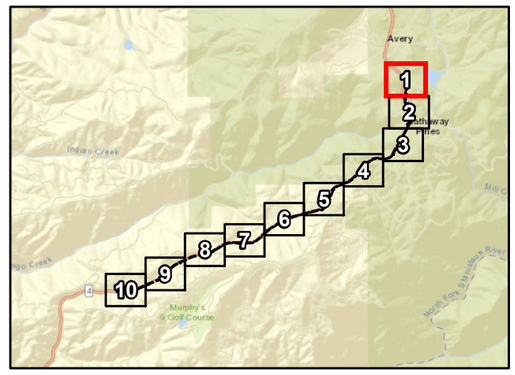

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary Source: KASL
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 3/27/2018

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Figure 3.2.
Aquatic Resources Delineation [1]
(Sheet 2 of 10)

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Three Criteria Sample Points

- Upland Point
- Waters Point

Waters of the U.S. Total (0.185 acres) [1] *

Wetlands Total (0.105 acres)

- Seasonal Wetland Swale (0.045 acres)
- Seep (0.060 acres)

Other Waters Total (0.079 acres)

- Intermittent Drainage (0.013 acres)
- Ephemeral Drainage (0.021 acres)
- Ditch (0.045 acres)

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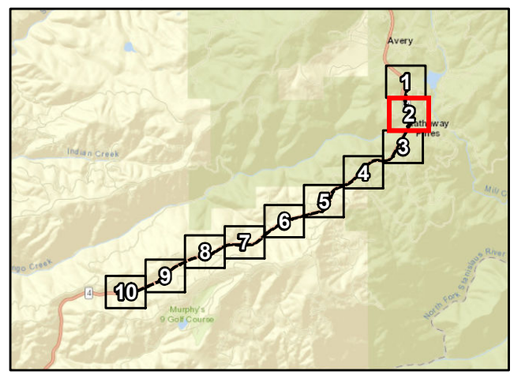

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary Source: KASL
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 3/27/2018

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Figure 3.3.
Aquatic Resources Delineation [1]
(Sheet 3 of 10)

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Three Criteria Sample Points

- Upland Point
- Waters Point

Waters of the U.S. Total (0.185 acres) [1] *

Wetlands Total (0.105 acres)

- Seasonal Wetland Swale (0.045 acres)
- Seep (0.060 acres)

Other Waters Total (0.079 acres)

- Intermittent Drainage (0.013 acres)
- Ephemeral Drainage (0.021 acres)
- Ditch (0.045 acres)

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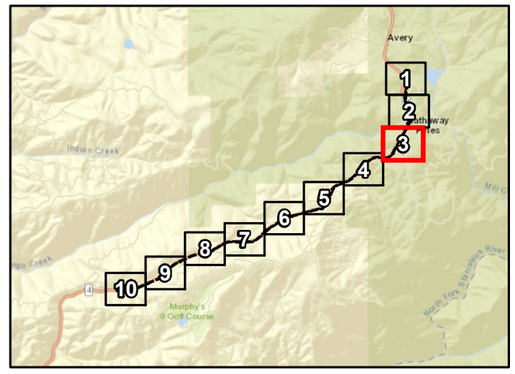

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary Source: KASL
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 3/27/2018

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Figure 3.4.
Aquatic Resources Delineation [1]
(Sheet 4 of 10)

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Three Criteria Sample Points

- Upland Point
- Waters Point

Waters of the U.S. Total (0.185 acres) [1] *

Wetlands Total (0.105 acres)

- Seasonal Wetland Swale (0.045 acres)
- Seep (0.060 acres)

Other Waters Total (0.079 acres)

- Intermittent Drainage (0.013 acres)
- Ephemeral Drainage (0.021 acres)
- Ditch (0.045 acres)

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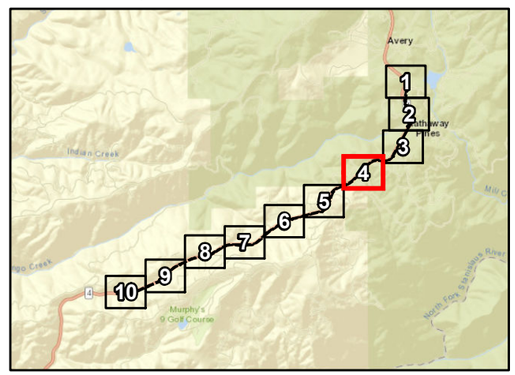

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Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary Source: KASL
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 3/27/2018

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Figure 3.5.
Aquatic Resources Delineation [1]
(Sheet 5 of 10)

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Three Criteria Sample Points

- Upland Point
- Waters Point

Waters of the U.S. Total (0.185 acres) [1] *

Wetlands Total (0.105 acres)

- Seasonal Wetland Swale (0.045 acres)
- Seep (0.060 acres)

Other Waters Total (0.079 acres)

- Intermittent Drainage (0.013 acres)
- Ephemeral Drainage (0.021 acres)
- Ditch (0.045 acres)

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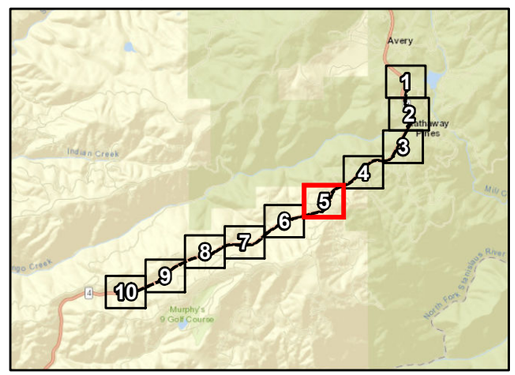

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Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary Source: KASL
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 3/27/2018

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Figure 3.6.
Aquatic Resources Delineation [1]
(Sheet 6 of 10)

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Three Criteria Sample Points

- Upland Point
- Waters Point

Waters of the U.S. Total (0.185 acres) [1] *

Wetlands Total (0.105 acres)

- Seasonal Wetland Swale (0.045 acres)
- Seep (0.060 acres)

Other Waters Total (0.079 acres)

- Intermittent Drainage (0.013 acres)
- Ephemeral Drainage (0.021 acres)
- Ditch (0.045 acres)

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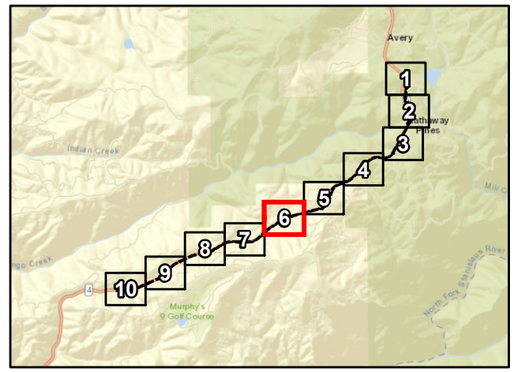

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary Source: KASL
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 3/27/2018

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Figure 3.7.
Aquatic Resources Delineation [1]
(Sheet 7 of 10)

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Three Criteria Sample Points

- Upland Point
- Waters Point

Waters of the U.S. Total (0.185 acres) [1] *

Wetlands Total (0.105 acres)

- Seasonal Wetland Swale (0.045 acres)
- Seep (0.060 acres)

Other Waters Total (0.079 acres)

- Intermittent Drainage (0.013 acres)
- Ephemeral Drainage (0.021 acres)
- Ditch (0.045 acres)

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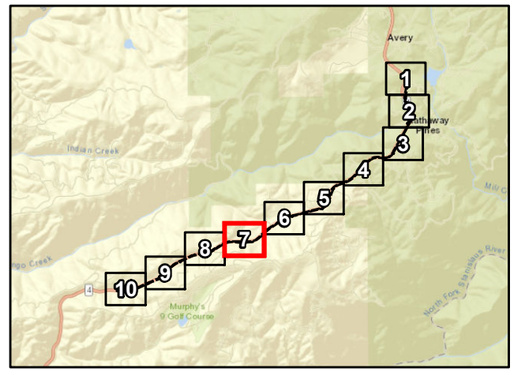

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary Source: KASL
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 3/27/2018

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Figure 3.8.
Aquatic Resources Delineation [1]
(Sheet 8 of 10)

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Three Criteria Sample Points

- Upland Point
- Waters Point

Waters of the U.S. Total (0.185 acres) [1] *

Wetlands Total (0.105 acres)

- Seasonal Wetland Swale (0.045 acres)
- Seep (0.060 acres)

Other Waters Total (0.079 acres)

- Intermittent Drainage (0.013 acres)
- Ephemeral Drainage (0.021 acres)
- Ditch (0.045 acres)

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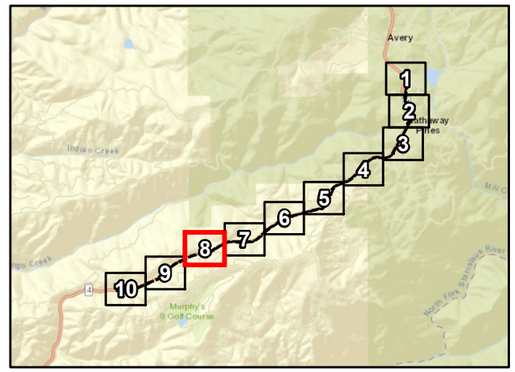

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2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary Source: KASL
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 3/27/2018

ECORP: N:\2017\2017-108 CCWD EBBETTS PASS\MAPS\JURISDICTIONAL_DELINEATION\USACE_DELINEATION\V1\CCWDEP_WD_20180507.MXD(MGKIT/CH/JDS) JSWAGER 5/8/2018

Figure 3.9.
Aquatic Resources Delineation [1]
(Sheet 9 of 10)

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Three Criteria Sample Points

- Upland Point
- Waters Point

Waters of the U.S. Total (0.185 acres) [1] *

Wetlands Total (0.105 acres)

- Seasonal Wetland Swale (0.045 acres)
- Seep (0.060 acres)

Other Waters Total (0.079 acres)

- Intermittent Drainage (0.013 acres)
- Ephemeral Drainage (0.021 acres)
- Ditch (0.045 acres)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*

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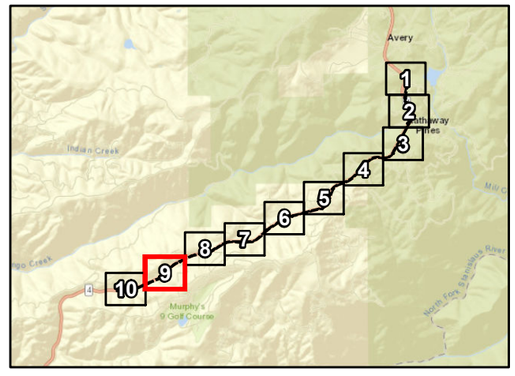
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary Source: KASL
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 3/27/2018

ECORP: N:\2017\2017-108 CCWD EBBETTS PASS\MAPS\JURISDICTIONAL_DELINEATION\V1\CCWDEP_WD_20180507.MXD(MGKIT/CHJ/DS) JSWAGER 5/8/2018

Figure 3.10.
Aquatic Resources Delineation [1]
(Sheet 10 of 10)

Map Features

- Project Boundary - 25.2 acres
- Reference Coordinate (NAD83)
- Existing Culvert

Three Criteria Sample Points

- Upland Point
- Waters Point

Waters of the U.S. Total (0.185 acres) [1] *

Wetlands Total (0.105 acres)

- Seasonal Wetland Swale (0.045 acres)
- Seep (0.060 acres)

Other Waters Total (0.079 acres)

- Intermittent Drainage (0.013 acres)
- Ephemeral Drainage (0.021 acres)
- Ditch (0.045 acres)

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*

** The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.*

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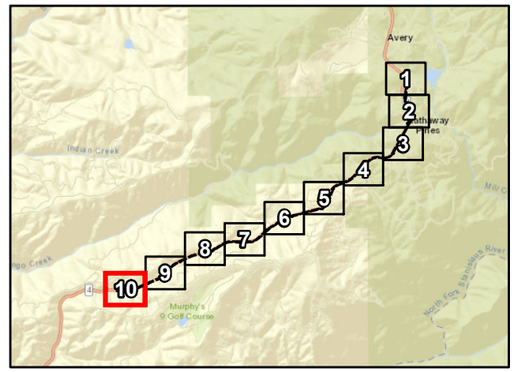


ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2017-108 CCWD Ebbetts Pass

Scale in Feet
0 200

Photo Source: NAIP, 2016
Boundary Source: KASL
Delineator(s): K. Kwan
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Map Date: 3/27/2018

ECORP: N:\2017\2017-108 CCWD EBBETTS PASS\MAPS\JURISDICTIONAL_DELINEATION\USACE_DELINEATION\V1\CCWDEP_WD_20180507.MXD (MGKIT/CH/JDS) - JSWAGER 5/8/2018

LIST OF ATTACHMENTS

ATTACHMENT A

Conceptual Site Plans

ATTACHMENT B

Representative Site Photographs

Photo 1. View of intermittent drainage ID-4, facing southwest.
Photo taken May 25, 2017.

Photo 2. View of intermittent drainage ID-2, facing southeast.
Photo taken May 25, 2017.

Photo 3. View of ephemeral drainage ED-6, facing northwest.
Photo taken July 12, 2017.

Photo 4. View of seasonal wetland swale SWS-2, facing west.
Photo taken July 12, 2017.

Photo 5. View of ephemeral drainage ED-2, facing west.
Photo taken May 25, 2017.

Photo 6. View of seep SEEP-1, facing southwest.
Photo taken May 24, 2017.

Photo 7. View of ephemeral drainage ED-1, facing southwest.
Photo taken May 25, 2017.

Photo 8. View of ephemeral drainage ED-5, facing west.
Photo taken May 25, 2017.

Calaveras County Water District
Ebbetts Pass Reach 1 Water Transmission
Pipeline Improvements Project

Additional Photos
Drainages, Wetlands, Seeps, etc.

Section 404/401 & 1602
Permit Applications

Photos Taken:
June 12, 2018

ID-4 (June 2018)

ID-4 (June 2018)

ED-7 (June 2018)

ED-7 (June 2018)

ID-2 (June 2018)

ID-2 (June 2018)

ED-6 (June 2018)

ED-6 (June 2018)

DITCH-3 (June 2018)

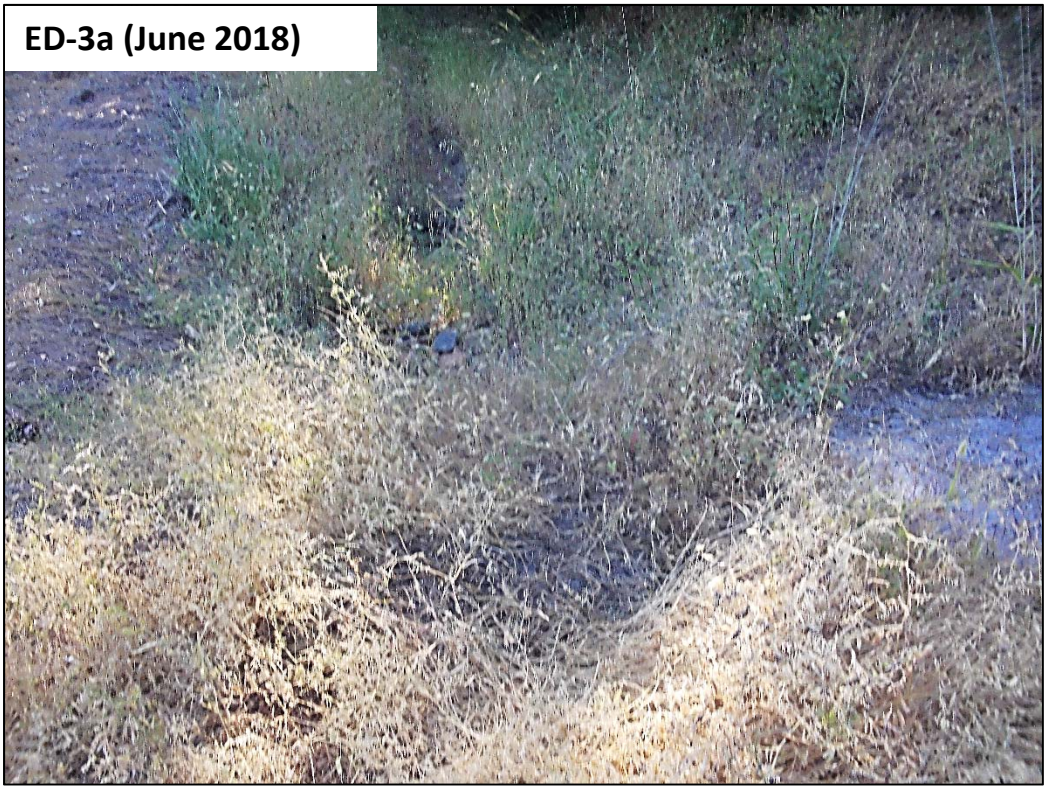
DITCH-3 (June 2018)

ED-3b(June 2018)

ED-3b (June 2018)

ED-3a (June 2018)

ED-3a (June 2018)



DITCH-4 (June 2018)

DITCH-4 (June 2018)

DITCH-5 (June 2018)

DITCH-5 (June 2018)

DITCH-5 (June 2018)

SWS-2 (June 2018)

DITCH-2 (June 2018)

DITCH-2 (June 2018)

ED-2 (June 2018)

ED-2 (June 2018)

ED-4 (June 2018)

ED-4 (June 2018)

SEEP-1 (June 2018)

SEEP-1 (June 2018)

SEEP-2 (June 2018)

SEEP-2 (June 2018)

ED-1 (June 2018)

ED-1 (June 2018)

ED-5 (June 2018)

ED-5 (June 2018)

DITCH-1 (June 2018)

DITCH-1 (June 2018)

ATTACHMENT C

Biological Resources Assessment

ATTACHMENT D

Tree Inventory

NOTE for MMT: **KASL**
Square tags w/ orange flagging **Ebbetts Pass Water Line Project Site**

TREES TO BE REMOVED

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH INCHES	DLR (feet)	CONDITIONAL ASSESSMENT	
						STRUCTURE	VIGOR
257	Incense Cedar	*(Calocedrus decurrens)*		7	8	Fair	Fair
260	Incense Cedar	*(Calocedrus decurrens)*		13	14	Poor to fair	Fair
261	Incense Cedar	*(Calocedrus decurrens)*		8	8	Poor to fair	Fair
273	Incense Cedar	*(Calocedrus decurrens)*		5	6	Fair	Fair
274	Incense Cedar	*(Calocedrus decurrens)*		4	3	Fair	Poor to fair
275	Incense Cedar	*(Calocedrus decurrens)*		5	7	Fair	Poor to fair
276	Incense Cedar	*(Calocedrus decurrens)*		20	17	Poor	Fair
287	Incense Cedar	*(Calocedrus decurrens)*		25	23	Fair	Fair
288	Incense Cedar	*(Calocedrus decurrens)*		16	15	Fair	Fair
290	Incense Cedar	*(Calocedrus decurrens)*		21	21	Fair	Fair
295	Incense Cedar	*(Calocedrus decurrens)*		21	20	Fair	Fair
378	Incense Cedar	*(Calocedrus decurrens)*		8	8	Fair	Fair
390	Incense Cedar	*(Calocedrus decurrens)*		21	23	Fair	Fair
392	Incense Cedar	*(Calocedrus decurrens)*		5	8	Poor to fair	Fair
399	Incense Cedar	*(Calocedrus decurrens)*		6	7	Fair	Fair
400	Incense Cedar	*(Calocedrus decurrens)*		5	6	Fair	Fair
401	Incense Cedar	*(Calocedrus decurrens)*		8	9	Poor to fair	Fair
402	Incense Cedar	*(Calocedrus decurrens)*		4	6	Poor to fair	Poor to fair
403	Incense Cedar	*(Calocedrus decurrens)*		6	7	Fair	Fair
404	Incense Cedar	*(Calocedrus decurrens)*		6	6	Fair	Fair
405	Incense Cedar	*(Calocedrus decurrens)*		14	15	Fair	Fair
406	Incense Cedar	*(Calocedrus decurrens)*		6	6	Fair	Fair
510	Incense Cedar	*(Calocedrus decurrens)*		5	6	Fair	Fair
513	Incense Cedar	*(Calocedrus decurrens)*		20	19	Fair	Fair
517	Incense Cedar	*(Calocedrus decurrens)*		5	6	Fair	Fair
722	Incense Cedar	*(Calocedrus decurrens)*	6,6,6	18	7	Fair	Fair
723	Incense Cedar	*(Calocedrus decurrens)*		7	7	Fair	Fair
851	Incense Cedar	*(Calocedrus decurrens)*		5	3	Fair	Fair
852	Incense Cedar	*(Calocedrus decurrens)*		4	5	Fair	Fair
855	Incense Cedar	*(Calocedrus decurrens)*		33	25	Fair	Fair
947	Incense Cedar	*(Calocedrus decurrens)*		7	8	Fair	Fair
994	Incense Cedar	*(Calocedrus decurrens)*		4	5	Fair	Fair
1160	Incense Cedar	*(Calocedrus decurrens)*		8	9	Fair	Fair
1161	Incense Cedar	*(Calocedrus decurrens)*		4	3	Fair	Poor to fair
1164	Incense Cedar	*(Calocedrus decurrens)*		8	8	Fair	Fair
1170	Incense Cedar	*(Calocedrus decurrens)*		5	6	Fair	Fair
1171	Incense Cedar	*(Calocedrus decurrens)*		6	6	Fair	Fair
1172	Incense Cedar	*(Calocedrus decurrens)*		4	4	Fair	Fair
1198	Incense Cedar	*(Calocedrus decurrens)*		6	9	Fair	Fair
1203	Incense Cedar	*(Calocedrus decurrens)*		4	10	Fair	Fair
1207	Incense Cedar	*(Calocedrus decurrens)*		5	5	Fair	Fair
1211	Incense Cedar	*(Calocedrus decurrens)*		4	5	Fair	Fair
1217	Incense Cedar	*(Calocedrus decurrens)*		6	6	Fair	Fair
1218	Incense Cedar	*(Calocedrus decurrens)*		4	4	Fair	Fair
	Incense Cedar	*(Calocedrus decurrens)*					
289	Redbud	*(Cercis canadensis)*	2,3,4,5,6	20	12	Fair	Fair
1104	California Black Walnut	*(Juglans californica)*		27	29	Fair	Fair
1175	Sugar Pine	*(Pinus lambertiana)*		5	5	Fair	Fair
1181	Sugar Pine	*(Pinus lambertiana)*		6	6	Fair	Fair
1183	Sugar Pine	*(Pinus lambertiana)*		7	8	Fair	Fair
1185	Sugar Pine	*(Pinus lambertiana)*		5	5	Fair	Fair
1188	Sugar Pine	*(Pinus lambertiana)*		7	8	Fair	Fair

NOTE for MMT: **KASL**
Square tags w/ orange flagging **Ebbetts Pass Water Line Project Site**

TREES TO BE REMOVED

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH INCHES	DLR (feet)	CONDITIONAL ASSESSMENT	
						STRUCTURE	VIGOR
1189	Sugar Pine	*(Pinus lambertiana)*		8	8	Fair	Fair
	Sugar Pine	*(Pinus lambertiana)*					
2	Ponderosa Pine	*(Pinus ponderosa)*		12	12	Fair	Fair
12	Ponderosa Pine	*(Pinus ponderosa)*		5	6	Fair	Fair
13	Ponderosa Pine	*(Pinus ponderosa)*		7	7	Fair	Fair
57	Ponderosa Pine	*(Pinus ponderosa)*		16	9	Fair	Fair
58	Ponderosa Pine	*(Pinus ponderosa)*		13	9	Poor to fair	Fair
203	Ponderosa Pine	*(Pinus ponderosa)*		31	26	Fair	Fair
256	Ponderosa Pine	*(Pinus ponderosa)*		30	26	Fair	Fair
258	Ponderosa Pine	*(Pinus ponderosa)*		18	20	Fair	Fair
358	Ponderosa Pine	*(Pinus ponderosa)*		10	9	Fair	Fair
368	Ponderosa Pine	*(Pinus ponderosa)*		6	6	Fair	Fair
374	Ponderosa Pine	*(Pinus ponderosa)*		13	15	Fair	Fair
375	Ponderosa Pine	*(Pinus ponderosa)*		5	4	Poor to fair	Poor to fair
379	Ponderosa Pine	*(Pinus ponderosa)*		5	6	Fair	Fair
388	Ponderosa Pine	*(Pinus ponderosa)*		7	8	Fair	Fair
468	Ponderosa Pine	*(Pinus ponderosa)*		25	26	Fair	Fair
475	Ponderosa Pine	*(Pinus ponderosa)*		10	14	Fair	Fair
476	Ponderosa Pine	*(Pinus ponderosa)*		15	16	Fair	Fair
477	Ponderosa Pine	*(Pinus ponderosa)*		19	24	Fair	Fair
489	Ponderosa Pine	*(Pinus ponderosa)*		19	22	Fair	Fair
490	Ponderosa Pine	*(Pinus ponderosa)*		16	16	Fair	Fair
491	Ponderosa Pine	*(Pinus ponderosa)*		18	17	Fair	Fair
492	Ponderosa Pine	*(Pinus ponderosa)*		19	18	Fair	Fair
501	Ponderosa Pine	*(Pinus ponderosa)*		18	17	Fair	Fair
506	Ponderosa Pine	*(Pinus ponderosa)*		18	17	Fair	Fair
507	Ponderosa Pine	*(Pinus ponderosa)*		16	17	Fair	Fair
511	Ponderosa Pine	*(Pinus ponderosa)*		20	22	Fair	Fair
514	Ponderosa Pine	*(Pinus ponderosa)*		4	5	Fair	Fair
592	Ponderosa Pine	*(Pinus ponderosa)*		20	24	Fair	Fair
691	Ponderosa Pine	*(Pinus ponderosa)*		6	7	Fair	Fair
720	Ponderosa Pine	*(Pinus ponderosa)*		17	17	Fair	Fair
721	Ponderosa Pine	*(Pinus ponderosa)*		22	20	Fair	Fair
724	Ponderosa Pine	*(Pinus ponderosa)*		17	16	Fair	Fair
725	Ponderosa Pine	*(Pinus ponderosa)*		7	6	Poor to fair	Poor
727	Ponderosa Pine	*(Pinus ponderosa)*		8	8	Fair	Fair
728	Ponderosa Pine	*(Pinus ponderosa)*	6,8	14	10	Fair	Fair
844	Ponderosa Pine	*(Pinus ponderosa)*		7	7	Fair	Fair
849	Ponderosa Pine	*(Pinus ponderosa)*		5	5	Fair	Fair
939	Ponderosa Pine	*(Pinus ponderosa)*		18	20	Fair	Fair
940	Ponderosa Pine	*(Pinus ponderosa)*	13,16	29	17	Fair	Fair
951	Ponderosa Pine	*(Pinus ponderosa)*		50	30	Fair	Fair
953	Ponderosa Pine	*(Pinus ponderosa)*		10	12	Fair	Fair
1101	Ponderosa Pine	*(Pinus ponderosa)*		12	9	Poor to fair	Poor to fair
1158	Ponderosa Pine	*(Pinus ponderosa)*		4	4	Fair	Fair
1162	Ponderosa Pine	*(Pinus ponderosa)*		4	5	Fair	Fair
1182	Ponderosa Pine	*(Pinus ponderosa)*		4	5	Fair	Fair
1186	Ponderosa Pine	*(Pinus ponderosa)*		9	9	Poor to fair	Poor to fair
1195	Ponderosa Pine	*(Pinus ponderosa)*		8	9	Fair	Fair
1196	Ponderosa Pine	*(Pinus ponderosa)*		5	5	Fair	Fair
1197	Ponderosa Pine	*(Pinus ponderosa)*		7	8	Fair	Fair
1205	Ponderosa Pine	*(Pinus ponderosa)*		11	13	Poor	Fair
1208	Ponderosa Pine	*(Pinus ponderosa)*		6	7	Fair	Fair

NOTE for MMT: **KASL**
Square tags w/ orange flagging **Ebbetts Pass Water Line Project Site**

TREES TO BE REMOVED

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH INCHES	DLR (feet)	CONDITIONAL ASSESSMENT	
						STRUCTURE	VIGOR
1230	Ponderosa Pine	*(Pinus ponderosa)*		13	12	Fair	Fair
1231	Ponderosa Pine	*(Pinus ponderosa)*		4	5	Poor to fair	Fair
1232	Ponderosa Pine	*(Pinus ponderosa)*		4	5	Fair	Fair
1233	Ponderosa Pine	*(Pinus ponderosa)*		4	5	Fair	Fair
1237	Ponderosa Pine	*(Pinus ponderosa)*		44	28	Fair	Fair
	Ponderosa Pine	*(Pinus ponderosa)*					
665	Foothill Pine	*(Pinus sabiniana)*		14	15	Fair	Fair
504	Black Oak	*(Quercus kelloggii)*	3,4,4	11	15	Fair	Fair
525	Black Oak	*(Quercus kelloggii)*		8	10	Fair	Fair
662	Black Oak	*(Quercus kelloggii)*		8	15	Fair	Fair
832	Black Oak	*(Quercus kelloggii)*	3,4	7	6	Fair	Fair
949	Black Oak	*(Quercus kelloggii)*	5,6	11	14	Fair	Fair
950	Black Oak	*(Quercus kelloggii)*		8	12	Fair	Fair
1173	Black Oak	*(Quercus kelloggii)*		18	21	Poor to fair	Fair
1216	Black Oak	*(Quercus kelloggii)*		7	14	Fair	Fair

ATTACHMENT E

Clean Water Act Section 404 Permit Application
(Provided electronically)

ATTACHMENT F

Clean Water Act Section 401 Water Quality Act Certification Application
(Provided electronically)

ATTACHMENT G

CEQA Draft Initial Study and Mitigated Negative Declaration
(Provided electronically)