



California Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
619 2<sup>nd</sup> Street  
Eureka, CA 95501  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

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



September 10, 2017

Dan Egan  
Happy Dreams Farm, LLC  
P.O. Box 241  
Redcrest, CA 95569

Subject: Incomplete Notification of Lake or Streambed Alteration  
Notification No. 1600-2017-0547-R1  
Egan Water Diversion and Stream Crossings Project



Dear Mr. Egan:

On August 10, 2017, the Department of Fish and Wildlife (Department) received your Notification of Lake or Streambed Alteration (Notification). On September 8, 2017, the Department determined that your Notification is incomplete because the information checked below is either missing or insufficient. To complete your Notification, please review the Notification instructions and provide the following notification sections, along with a copy of this letter, to the Department.

- Section 6: Fees*
- Section 10A: Project Description*

To complete Section 6, revise Project 2. The well described for this project, although unpermitted, is not jurisdictional to the Department. However, the riparian zone and stream bank encroachment from water storage located downstream from Project 1 is jurisdictional. Revise Project 2 to include relocation of storage tanks and restoration of stream bank and riparian zone.

To complete Section 10, revise attachment to reflect change to Project 2 and describe proposed work.

Please note that you may not proceed with your project until your Notification is deemed complete, and you have obtained a Lake or Streambed Alteration Agreement, if required. If you have any questions regarding this matter or need additional information, please consult the "Notification Instructions" and/or "Questions and Answers" that were included in the notification materials. You may also contact Senior Environmental Scientist Specialist, Ryan Bourque at [ryan.bourque@wildlife.ca.gov](mailto:ryan.bourque@wildlife.ca.gov) or (707) 441-2064.

Dan Egan  
September 10, 2017  
Page 2 of 2

Sincerely,

A handwritten signature in blue ink that reads "Scott Bauer". The signature is written in a cursive style with a large initial "S".

Scott Bauer  
Senior Environmental Scientist Supervisor

cc:Ryan Bourque

ec: Tyler Ledwith  
Manhard Consulting  
tledwith@manhard.com

## **Project Description:**

This project addresses CDFW jurisdictional issues on the APN 211-151-017 including those items listed in the “Notice of Violation of Fish and Game Code Sections 1602 and 5650 in Conjunction with Marijuana cultivation” issued on May 11, 2017.

Items #1 and #4 of the violation consist of issues of geologically instability and a landslide associated with an existing road. A professional Registered Geologist from SHN Consulting Engineers & Geologist, Inc. was retained to investigate and address these items. A site investigation was conducted and the finding, with treatments, were including in a report dated June 27, 2017. This report was delivered to CDFW in July 2017 and is included with this notification.

Item #2, identified an unpermitted undersized culvert (18” diameter) at a stream crossing (STX -2). A field and hydrologic examination of the stream crossing was conducted and the recommendation is to replace the culvert with a 24” diameter pipe, set at grade, align with channel, rocked fillslopes, and critical dip constructed on site.

Item #3 identified unpermitted water diversion for the property. Included with this notification is a grant deed identifying the property owner’s right to divert water, and replace, repair and maintain a spring box from Humboldt County Parcel 211-553-04. This deed is included with this notification. In addition, an Initial Statement of Diversion and Use was filed with the State Water Resources Control Board in 2017 for this diversion point. This document is also included with this notification.

An additional stream crossing (STX-1) was identified as an undersized and failing culvert on a class III stream. A field and hydrologic examination of the stream crossing was conducted and the recommendation is to replace the culvert with a 24” diameter pipe, set at grade, align with channel, rocked fillslopes, and critical dip constructed on site.

The site currently has ~19,500 gallons of storage. The property owner plans on installing two 50,000 gallon tanks in 2017/2018 to store water for domestic and irrigation purposes. Through the planning and development process, the property owner plans to increase hard storage and rain catchment use on the property to meet future forbearance requirements for domestic and cultivation uses. The property owner also installed a deep well in 2017 to help meet forbearance of surface flow in the immediate future.

Point of Diversion



Figure 1. Looking downstream at Point of Diversion (POD) spring in Class II drainage

Source stream upstream and downstream of the point of diversion



Figure 2. Looking upstream from POD.



Figure 3. Standing upstream of POD and looking downstream

Diversion Works



Figure 4. Two 3000-gallon storage tanks located at POD.

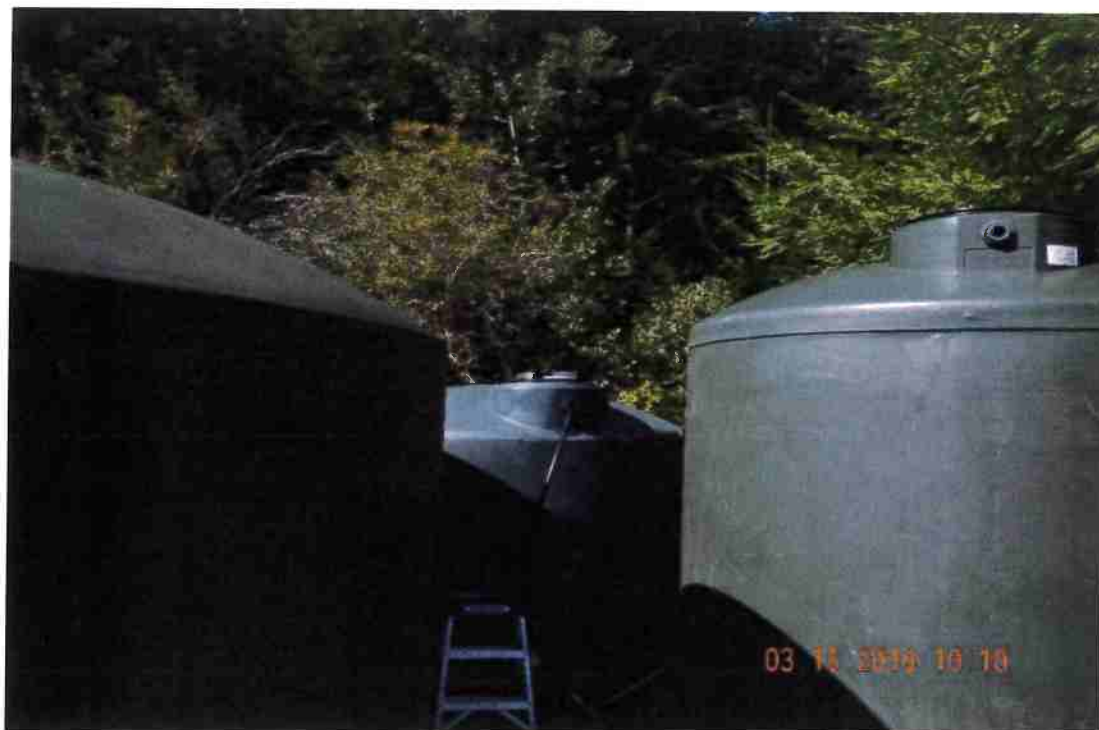


Figure 5. Storage tanks at cultivation site. At the time of field investigation, the site had 19,500 gallons of tank storage is planning on adding 100,000 gallons in tank storage.

Place of Use



Figure 6. Single family residence



Figure 7. Cannabis irrigated area

Stream Crossings

STX-1



Figure 8. Inlet at 12" pipe at STX-1. Culvert will be replaced with a 24" diameter pipe.



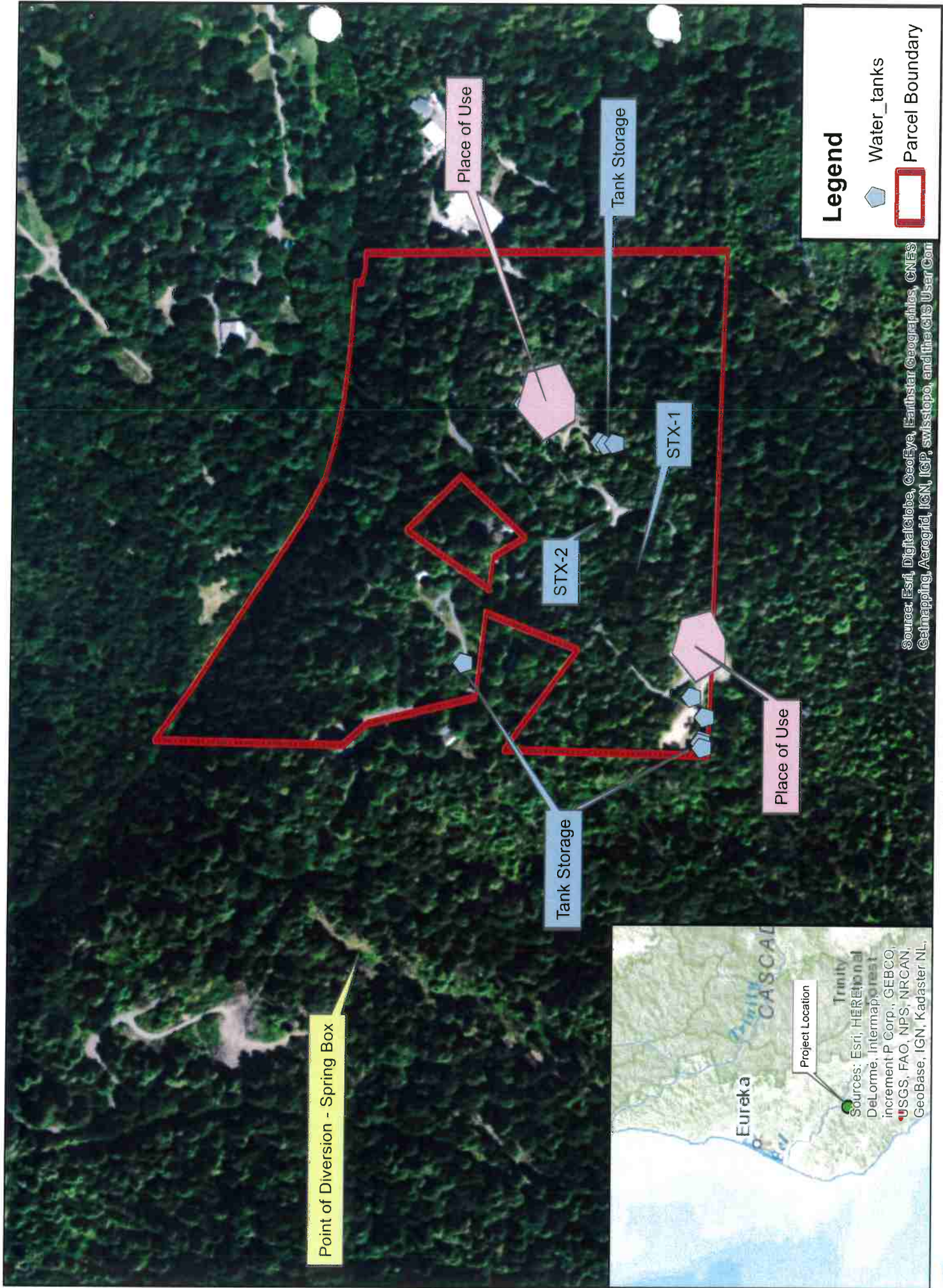


Figure 9. Outlet at 12" pipe at STX-1. Culvert will be replaced with a 24" diameter pipe.

STX-2



Figure 10. Inlet at 18" CMP at STX-2. Culvert will be replaced with a 24" diameter pipe.



HAPPY DREAMS FARM  
 Humboldt APN 211-151-017



Applicant Name: Dan Egan

Project Name: Happy Dreams Farm

## ATTACHMENT C

### Water Diversion Questionnaire

Complete this attachment **if** the project is directly related to any diversion, obstruction, extraction, or impoundment of the natural flow of a river, stream, or lake. Provide the number assigned to the State Water Resources Control Board (SWRCB) application, permit, license, registration, statement of diversion, and use, or other authorization to divert, extract, or impound water, if applicable. If you have a current or expired Lake or Streambed Alteration Agreement (Agreement) for some activity related to your project, provide the Agreement number in your project description below and attach this form, with the information requested on one or more separate pages, to the notification form (DFW 2023).

**I. Diversion or Obstruction**

- A. Attach plans of any diversion or water storage structure or facility that will be constructed or if no structures or facilities will be constructed, photographs of the project site, including any existing facilities or structures.
- B. Please complete the water use table 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).

SEASON OF DIVERSION		PURPOSE OF USE	DIVERSION RATE (cfs or gpm)	AMOUNT USED (acre feet)	
BEGINNING DATE (Mo. & Day)	ENDING DATE (Mo. & Day)			FROM STORAGE	BY DIVERSION
Jan 1	Dec 31	Domestic	110 gpd		0.13
Mar 1	Aug 14	Irrigation	960 gpd		0.104
Aug 15	Nov 15	Irrigation	225 gpd	0.06	
Dec 15	Feb 15	Storage	225 gpd		0.06

- C. Attach a topographic map that is labeled to show the following:
  1. Source of the water
  2. Points of diversion
  3. Areas of use
  4. Storage areas
- D. Specify the maximum instantaneous rate of withdrawal (using proposed equipment) in cubic feet per second (cfs) or gallons per minute (gpm).

~ 3 gpm



E. Check each box below that applies to the project water rights and attach supporting documents.

Riparian. *Attach the most recent Statement of Water Diversion and Use filed with the SWRCB.*

Diversion for immediate use.

Diversion to storage (for less than 30 days).

Appropriative.

Pre-1914. *Attach the most recent Statement of Water Diversion and Use filed with SWRCB.*

Post-1914. *Attach a copy of the applicant's water right application, permit, or license filed with or issued by SWRCB.*

Small domestic, livestock stockpond, or small irrigation use registration. *Attach a copy of the applicant's registration of water use form filed with, or registration certificate issued by, SWRCB (See Water Code section 1228 et seq.).*

Diversion for immediate use.

Diversion to storage.

Purchased or contracted water. *Attach a copy of the applicant's contract or letter from the applicant's water provider.*

Other. *Describe below or attach separate page.*

A Small Domestic Use Registration and Small Irrigation Use Registration will be filed for the site in 2017. Rain water catchment will be stored in tanks and used to provide some irrigation water. A Well was drilled in 2017 and will be used for domestic.

F. 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:

0 gpm

G. *Other information.* After the Department reviews the project description, and based on the project's location and potential impacts to fish and wildlife resources, the Department will determine if additional information is needed before accepting the notification as complete. Such information could include more site-specific information to ensure that the terms and conditions in the Agreement issued to the applicant will be adequate to protect the fish and wildlife resources the diversion or obstruction could adversely affect. Site-specific information could include biological or hydrological studies or surveys based on the season of diversion, the location of the diversion relative to other diversions in the watershed, the method of diversion, and the quantity of water to be diverted, such as the following:



**WATER DIVERSION QUESTIONNAIRE  
FISH AND GAME CODE SECTION 1602**

1. *Water Availability Analysis* to determine if the water can be diverted without causing substantial adverse effects on downstream fish and wildlife resources. Water availability analyses are based on a comparison of flows without any diversions (unimpaired flows) and flows available when all known diversions are "subtracted" (impaired flows).
2. *Instream Flow Study* to determine the minimum bypass flows needed and maximum rates of withdrawal possible to provide adequate depths and velocities to protect habitat for all life stages of aquatic resources. The study plan must be prepared by a qualified fisheries biologist and approved by the Department, will determine the effects of the proposed diversion on flow depth and velocity.
3. *Water Quality Study* to assess the effects of the proposed water diversion or impoundment on water temperature and water quality at and downstream from the point(s) of diversion.

**II. Permanent or Temporary Reservoir**

Please provide the information below *if* the project includes the construction of a reservoir, whether permanent or temporary, and/or the filling of an existing reservoir by diverting or obstructing the flow of a river, stream, or lake.

A. Proposed use of the stored water:

N/A
-----

B. Construction plans for the reservoir and dam. (*Attach plans*)

C. A complete description of the reservoir and dam, including the methods and materials that will be used to construct the reservoir and dam and the following dimensions certified by a licensed professional: the width, length, depth, and total surface area of the reservoir pool; the volume of water in acre-feet that will be stored in the reservoir; and the height and length of the dam.

D. The amount of riparian land that will be inundated (i.e., upstream from the dam): N/A

E. Where vehicles will enter and exit the project site during construction and for maintenance purposes after construction. (*Attach map*)

F. The maximum distance of the disturbance that will occur upstream and downstream during construction:

N/A
-----

G. The methods employed to ensure that the flow is maintained below the dam at all times when water is being diverted into the reservoir:

N/A
-----



H. Specify the time period when the area below the dam becomes dry, if at all.

N/A

I. The methods employed to ensure that adult and juvenile fish will be able to pass over or around the dam:

N/A

J. If a fish ladder is necessary to enable adult and juvenile fish to pass over or around the dam, provide construction plans and an operation plan for the fish ladder. *(Enclose, if applicable)*

K. The methods employed to monitor and maintain water quality (including temperature) within the reservoir:

N/A

**III. Temporary Reservoir**

Please provide the information below *if* the project includes the construction of a temporary reservoir only within the stream zone.

A. Date of dam installation: N/A

B. Date of dam removal: N/A

C. Amount of time it will take to construct the dam: N/A

D. Amount of time it will take to remove the dam: N/A

E. Methods to ensure that the reservoir pool will be drained in a manner that does not strand or otherwise harm fish:

N/A



Applicant Name: Dan Egan

Project Name: Happy Dreams Farm

## ATTACHMENT E

### Remediation of Marijuana Cultivation Sites

Complete this attachment **if** the primary purpose of the project is to remediate a marijuana cultivation site and submit the attachment with the notification form (DFW 2023) and fee in Section IV. "Remediate" means to perform work that reduces or eliminates the direct and indirect adverse impacts on fish and wildlife and their habitat caused by a project or activity the Department views as unlawful.

#### I. ORDER OR NOTICE

Are you required to perform the work described in the notification pursuant to a court or administrative agency notice or order?

Yes (Enclose a copy of the order or notice)  No

Did you receive a notice of violation (NOV) from the Department that relates to the work described in the notification?

Yes (Enclose a copy of the NOV)  No

#### II. ORDINANCE OR PERMIT

What is the name of the town/city and county where the marijuana cultivation site that requires remediation is located?

Town/City: Redcrest County: Humboldt

Does the town/city or county named above have a rule, ordinance, or other regulation or law that governs or otherwise regulates the cultivation of marijuana within its boundaries?

Yes: Town/City  Yes: County  No  Unknown

Are you required to have a permit or some other type of written authorization (permit) from the city/town and/or county named above to cultivate marijuana within the city/town and/or county?

Yes (Enclose a copy of the permit)  No  Unknown

#### III. REMEDIATION AREA

Identify the total size of the remediation area in square feet. To calculate the total size of the remediation area, calculate each area that requires any type of remediation and add each area together to calculate the total area.

Remediation area in total: 600 square feet





**IV. FEE**

Submit the applicable fee below based on the total size of the remediation area. The remediation fee is in addition to the notification fee and **must** be submitted by **separate** check or other method of payment (Cal. Code Regs., tit. 14, § 699.5, subd. (i)(3)(A)).

\$3,000 if the total remediation area is less than or equal to 1,000 square feet

\$5,000 if the total remediation area is greater than 1,000 square feet

**V. REMEDIATION PLAN**

Has a plan to remediate the area(s) been completed?

Yes (*Enclose the plan*)

No

**Note:** If “yes” is checked, the remediation plan **must** be enclosed with the notification. If “no” is checked, or the Department determines the remediation plan enclosed with the notification is inadequate or incomplete, the Department may require you to have a licensed engineer or qualified environmental consultant amend the plan or submit a new plan for your notification to be complete.

Have you consulted with or retained a licensed engineer or environmental consultant to address your Cannabis cultivation?

Yes (*Provide the information below*)

No

Name of Company	Name of Engineer or Consultant	Business Telephone
Manhard Consulting	Tyler Ledwith	444-3800

**VI. WATER SUPPLY**

How is water supplied to the marijuana cultivation site(s) that require remediation?

Diversion, obstruction, extraction, or impoundment of a river, stream, or lake.

*If this box is checked, you **must** also complete Attachment C.*

Spring(s).

*If this box is checked, you **must** also complete Attachment C.*

Private well(s).

*If this box is checked, provide well log information with this attachment.*

Public water system.

*Name of public water system:* \_\_\_\_\_

Water hauling.

*Name of water hauler:* \_\_\_\_\_

Other.

*Specify:* \_\_\_\_\_

Continued on additional page(s)

## CNDDDB Quad Species List 43 ords.

Element Type	Scientific Name	Common Name	Element Code	Federal Status	State Status	CDFW Status	CA Rare Plant Rank	Quad Code	Quad Name	Data Status	Taxonomic Sort
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4012348	Redcrest	Mapped and Unprocessed	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012348	Redcrest	Mapped	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana boyllii	foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	SSC	-	4012348	Redcrest	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boyllii
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4012348	Redcrest	Mapped	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Birds	Accipiter cooperii	Cooper's hawk	ABNKC12040	None	None	WL	-	4012348	Redcrest	Mapped and Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter striatus	sharp-shinned hawk	ABNKC12020	None	None	WL	-	4012348	Redcrest	Mapped	Animals - Birds - Accipitridae - Accipiter striatus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	4012348	Redcrest	Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012348	Redcrest	Mapped and Unprocessed	Animals - Birds - Accipitridae - Pandion haliaetus
Animals - Birds	Brachyramphus marmoratus	marbled murrelet	ABNNN06010	Threatened	Endangered	-	-	4012348	Redcrest	Mapped	Animals - Birds - Alcidae - Brachyramphus marmoratus
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	FP	-	4012348	Redcrest	Unprocessed	Animals - Birds - Falconidae - Falco peregrinus anatum
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	4012348	Redcrest	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Fish	Oncorhynchus kisutch	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012348	Redcrest	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - Klamath Mountains Province DPS	AFCHA0209D	None	None	SSC	-	4012348	Redcrest	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - northern California DPS	AFCHA0209Q	Threatened	None	-	-	4012348	Redcrest	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus mykiss irideus	summer-run steelhead trout	AFCHA0213B	None	None	SSC	-	4012348	Redcrest	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus tshawytscha	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4012348	Redcrest	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha

Animals - Insects	<i>Bombus caliginosus</i>	obscure bumble bee	IIHYM24380	None	None	-	-	4012348	Redcrest	Mapped	Animals - Insects - Apidae - <i>Bombus caliginosus</i>
Animals - Mammals	<i>Erethizon dorsatum</i>	North American porcupine	AMAFJ01010	None	None	-	-	4012348	Redcrest	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - <i>Erethizon dorsatum</i>
Animals - Mammals	<i>Arborimus pomo</i>	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4012348	Redcrest	Mapped	Animals - Mammals - Muridae - <i>Arborimus pomo</i>
Animals - Mammals	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	4012348	Redcrest	Mapped	Animals - Mammals - Vespertilionidae - <i>Corynorhinus townsendii</i>
Animals - Mammals	<i>Lasionycteris noctivagans</i>	silver-haired bat	AMACC02010	None	None	-	-	4012348	Redcrest	Unprocessed	Animals - Mammals - Vespertilionidae - <i>Lasionycteris noctivagans</i>
Animals - Mammals	<i>Myotis volans</i>	long-legged myotis	AMACC01110	None	None	-	-	4012348	Redcrest	Mapped	Animals - Mammals - Vespertilionidae - <i>Myotis volans</i>
Animals - Mammals	<i>Myotis yumanensis</i>	Yuma myotis	AMACC01020	None	None	-	-	4012348	Redcrest	Mapped	Animals - Mammals - Vespertilionidae - <i>Myotis yumanensis</i>
Animals - Mollusks	<i>Anodonta californiensis</i>	California floater	IMBIV04020	None	None	-	-	4012348	Redcrest	Unprocessed	Animals - Mollusks - Unionidae - <i>Anodonta californiensis</i>
Animals - Mollusks	<i>Gonidea angulata</i>	western ridged mussel	IMBIV19010	None	None	-	-	4012348	Redcrest	Unprocessed	Animals - Mollusks - Unionidae - <i>Gonidea angulata</i>
Animals - Reptiles	<i>Emys marmorata</i>	western pond turtle	ARAAD02030	None	None	SSC	-	4012348	Redcrest	Mapped and Unprocessed	Animals - Reptiles - Emydidae - <i>Emys marmorata</i>
Plants - Lichens	<i>Usnea longissima</i>	Methuselah's beard lichen	NLLEC5P420	None	None	-	4.2	4012348	Redcrest	Mapped and Unprocessed	Plants - Lichens - Parmeliaceae - <i>Usnea longissima</i>
Plants - Vascular	<i>Hemizonia congesta</i> ssp. <i>tracyi</i>	Tracy's tarplant	PDAST4R067	None	None	-	4.3	4012348	Redcrest	Unprocessed	Plants - Vascular - Asteraceae - <i>Hemizonia congesta</i> ssp. <i>tracyi</i>
Plants - Vascular	<i>Packera bolanderi</i> var. <i>bolanderi</i>	seacoast ragwort	PDAST8H0H1	None	None	-	2B.2	4012348	Redcrest	Mapped and Unprocessed	Plants - Vascular - Asteraceae - <i>Packera bolanderi</i> var. <i>bolanderi</i>
Plants - Vascular	<i>Carex arcta</i>	northern clustered sedge	PMCYP030X0	None	None	-	2B.2	4012348	Redcrest	Mapped	Plants - Vascular - Cyperaceae - <i>Carex arcta</i>
Plants - Vascular	<i>Lathyrus glandulosus</i>	sticky pea	PDFAB251A0	None	None	-	4.3	4012348	Redcrest	Unprocessed	Plants - Vascular - Fabaceae - <i>Lathyrus glandulosus</i>
Plants - Vascular	<i>Lycopus uniflorus</i>	northern bugleweed	PDLAM0X080	None	None	-	4.3	4012348	Redcrest	Unprocessed	Plants - Vascular - Lamiaceae - <i>Lycopus uniflorus</i>

Plants - Vascular	<i>Lilium kelloggii</i>	Kellogg's lily	PMLIL1A0A0	None	None	-	4.3	4012348	Redcrest	Unprocessed	Plants - Vascular - Liliaceae - <i>Lilium kelloggii</i>
Plants - Vascular	<i>Lilium rubescens</i>	redwood lily	PMLIL1A0N0	None	None	-	4.2	4012348	Redcrest	Unprocessed	Plants - Vascular - Liliaceae - <i>Lilium rubescens</i>
Plants - Vascular	<i>Lycopodium clavatum</i>	running-pine	PPLYC01080	None	None	-	4.1	4012348	Redcrest	Mapped and Unprocessed	Plants - Vascular - Lycopodiaceae - <i>Lycopodium clavatum</i>
Plants - Vascular	<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	4012348	Redcrest	Mapped and Unprocessed	Plants - Vascular - Malvaceae - <i>Sidalcea malachroides</i>
Plants - Vascular	<i>Pityopus californicus</i>	California pinefoot	PDMON05010	None	None	-	4.2	4012348	Redcrest	Unprocessed	Plants - Vascular - Monotropaceae - <i>Pityopus californicus</i>
Plants - Vascular	<i>Montia howellii</i>	Howell's montia	PDPOR05070	None	None	-	2B.2	4012348	Redcrest	Mapped and Unprocessed	Plants - Vascular - Montiaceae - <i>Montia howellii</i>
Plants - Vascular	<i>Epilobium septentrionale</i>	Humboldt County fuchsia	PDONA06110	None	None	-	4.3	4012348	Redcrest	Unprocessed	Plants - Vascular - Onagraceae - <i>Epilobium septentrionale</i>
Plants - Vascular	<i>Listera cordata</i>	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4012348	Redcrest	Unprocessed	Plants - Vascular - Orchidaceae - <i>Listera cordata</i>
Plants - Vascular	<i>Castilleja ambigua</i> var. <i>ambigua</i>	johnny-nip	PDSCR0D401	None	None	-	4.2	4012348	Redcrest	Unprocessed	Plants - Vascular - Orobanchaceae - <i>Castilleja ambigua</i> var. <i>ambigua</i>
Plants - Vascular	<i>Pleuropogon refractus</i>	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4012348	Redcrest	Unprocessed	Plants - Vascular - Poaceae - <i>Pleuropogon refractus</i>
Plants - Vascular	<i>Mitellastra caulescens</i>	leafy-stemmed mitrewort	PDSAX0N020	None	None	-	4.2	4012348	Redcrest	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Mitellastra caulescens</i>



Technical Memorandum

- Civil Engineering
- Surveying
- Water Resources Management
- Water & Wastewater Engineering
- Supply Chain Logistics
- Construction Management
- Environmental Sciences
- Landscape Architecture
- Land Planning

July 28, 2017

California Department of Fish and Wildlife  
 Northern Region  
 619 Second Street  
 Eureka, CA 95501

Subject: Daniel Eagan – Humboldt County APN 211-151-017; Redcrest, CA  
 Culvert Sizing for Road Crossings

This memo summarizes the assessment of two culverts subject to Fish and Wildlife Code 1602 within the subject parcel. All culvert locations were evaluated by visual inspection of channel morphology as a preliminary pipe sizing method. A hydrologic assessment was done to validate the field recommendations for the culvert replacements. Culverts were designed to convey the 100-year storm flow at a headwater to diameter ratio of 1.0.

Based on the calculated hundred-year flood magnitudes, both STX-1 and STX-2 were determined to be undersized for the 100-year storm event and proposed to be replaced with larger culverts. The prescriptions are summarized in Table 1.

Table 1: Culvert Status

Culvert	Latitude	Longitude	Existing Diameter	Prescription
STX-1	40.3358 °	-123.9079°	12"	Replace with 24" pipe, rock inlet and outlet, and install critical dip at site.
STX-2	40.3352 °	-123.9079°	18"	Replace with 24" pipe, rock inlet and outlet, install critical dip at site.

All contributing watersheds are less than 200 acres, and therefore the Rational Method was appropriately used to determine the magnitude of the hundred-year flood at the culvert locations:

$$Q = CiA \quad \text{(Equation 1)}$$

where  $C$  is the runoff coefficient,  $i$  is the intensity in inches/hour, and  $A$  is the drainage area in acres.

The watershed area was determined using Google Earth polygon tool and USGS quadrangle topo layer (Figure A). The runoff coefficient was taken to be 0.30 for forested land cover. Precipitation intensity was determined using the hundred-year storm estimates on the precipitation frequency table from the NOAA Weott weather station (Figure B). The time of concentration was assumed to be 15 minutes for all sub-basins due to the watershed size, steep terrain and land cover. The precipitation intensity was therefore assumed to be 2.51 inches per hour. The calculated hundred-year flow is shown in Table 2.

Table 2: Rational Method Q

Stream Crossing	Area (acres)	Rational Q <sub>100</sub> (cfs)
1	7.11	6.4
2	11.00	9.4

Using the design flows, the culverts were sized using Manning's equation and compared with nomograph values and field observations. For Manning's equation, the roughness coefficient was taken to be the corrugated metal coefficient: 0.022, the slope was assumed 1% and the ratio to full depth of the pipe was designed for 100% full.

A nomograph particular for corrugated metal pipe culverts with inlet control (Figure C) was used to double-check the Manning's equation estimate. The head wall to diameter ratio was assumed to be 1.0. The results of the diameter calculations for culverts needing replacement are shown in Table 3.

Table 3: Culvert Diameter Results

Stream Crossing	Q <sub>100</sub> (cfs)	Manning's Diameter (inches)	Nomograph Diameter (inches)	Field Recommendations	Standard Culvert Diameter Recommendation (inches)
STX-1	6.4	16	20	Road cutbank spring/seep with 7-acre watershed above. Site is failing. Site features indicate a 24" diameter pipe would be sufficient.	24
STX-2	9.4	24	22	Channel width indicates and upstream woody debris loading indicate a 24" diameter pipe would be sufficient.	24

**FIGURE A:**  
Stream Crossing Watershed Areas

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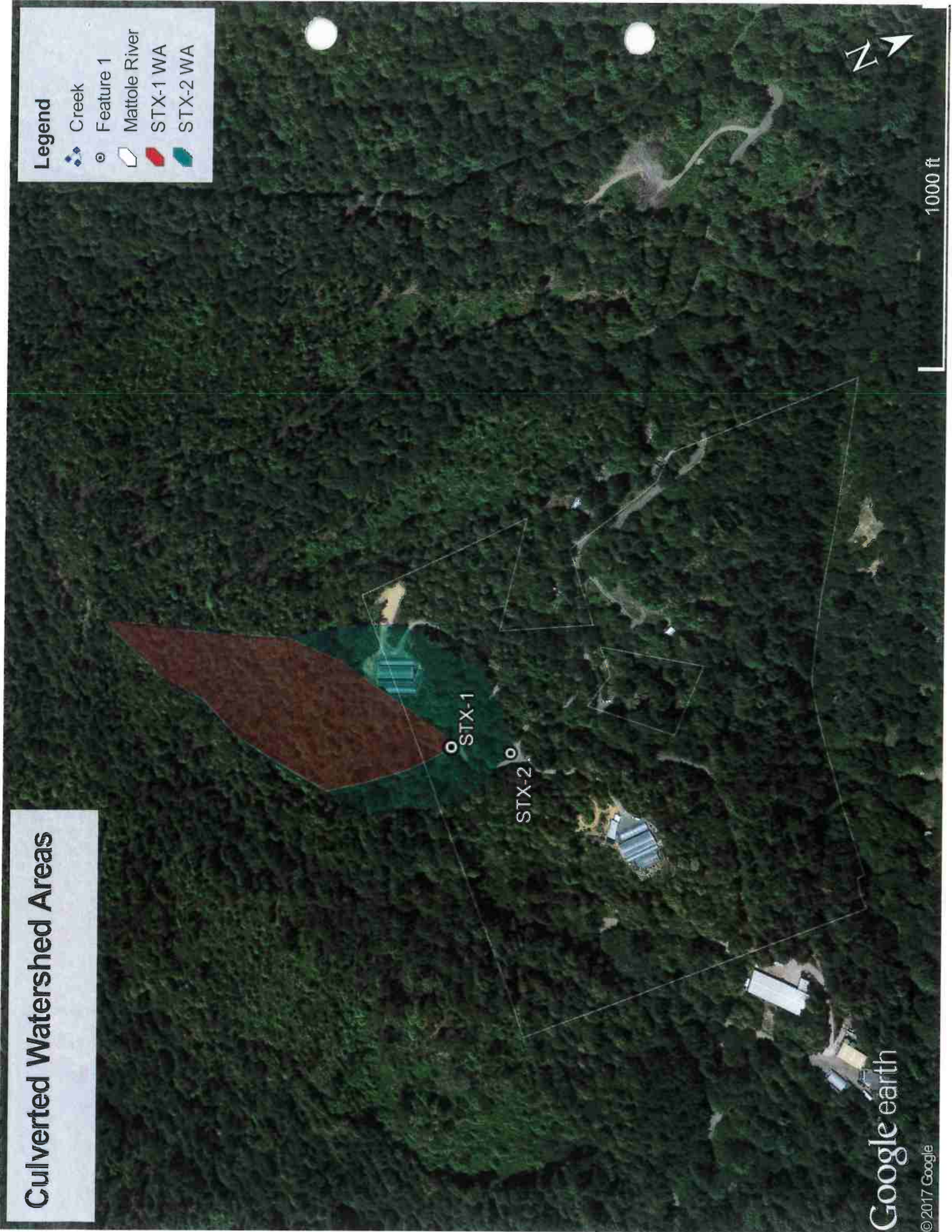
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# Culverted Watershed Areas

## Legend

- Creek
- Feature 1
- Mattole River
- STX-1 WA
- STX-2 WA





**FIGURE B:**  
NOAA PF Data Server Precipitation Data (Redcrest)

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NOAA Atlas 14, Volume 6, Version 2  
 Location name: Redcrest, California, USA\*  
 Latitude: 40.3358°, Longitude: -123.9079°  
 Elevation: 425.67 ft\*\*



\* source: ESRI Maps  
 \*\* source: USGS

**POINT PRECIPITATION FREQUENCY ESTIMATES**

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aeriels](#)

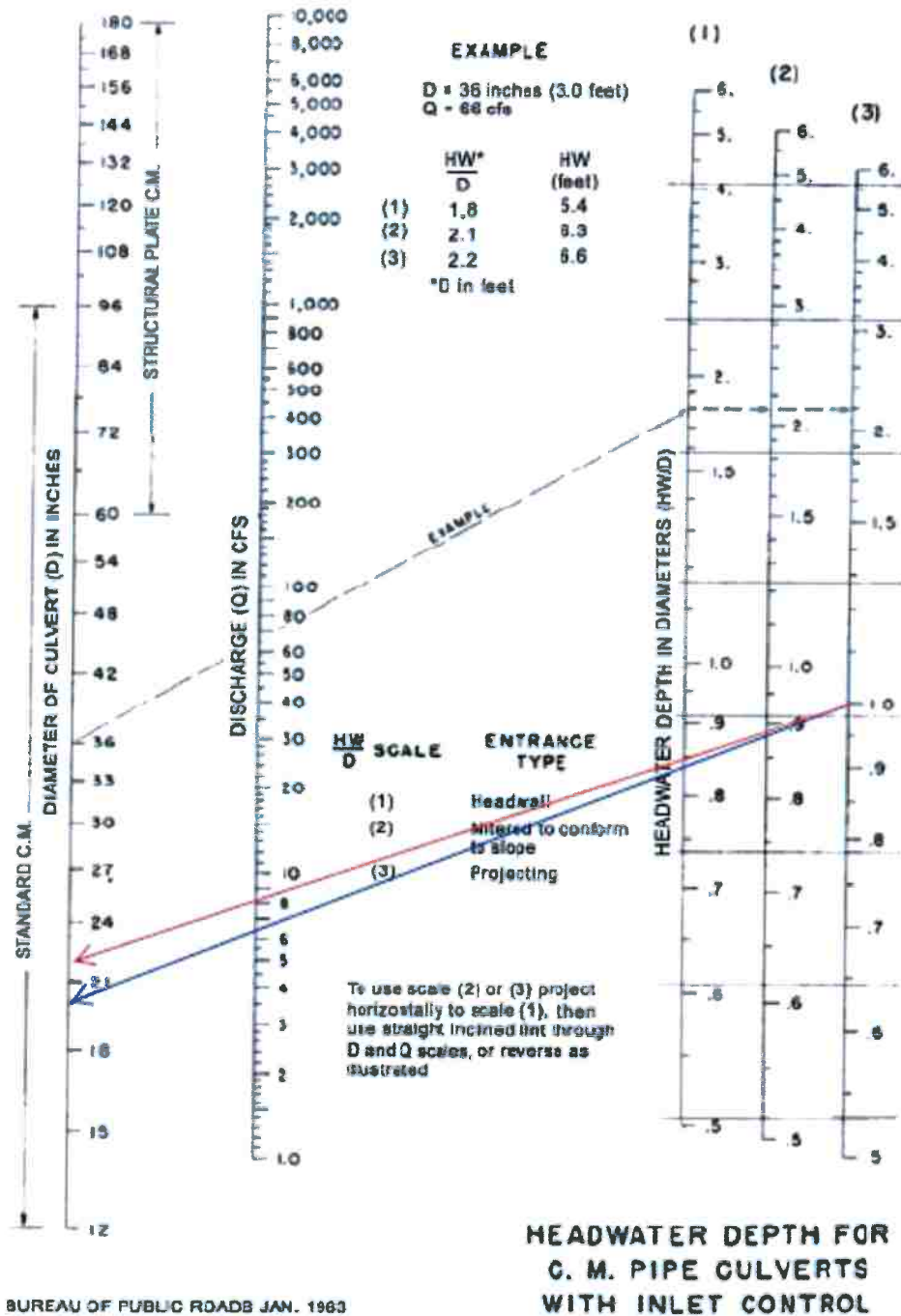
**PF tabular**

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour) <sup>1</sup>										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.79 (1.57-2.05)	2.12 (1.87-2.45)	2.59 (2.27-2.99)	2.98 (2.58-3.46)	3.50 (2.92-4.24)	3.91 (3.18-4.86)	4.34 (3.43-5.54)	4.79 (3.66-6.32)	5.40 (3.94-7.49)	5.88 (4.12-8.47)
10-min	1.28 (1.13-1.46)	1.52 (1.34-1.75)	1.85 (1.63-2.14)	2.13 (1.85-2.48)	2.51 (2.09-3.04)	2.80 (2.28-3.48)	3.11 (2.46-3.98)	3.43 (2.63-4.53)	3.87 (2.83-5.36)	4.21 (2.95-6.07)
15-min	1.03 (0.908-1.18)	1.23 (1.08-1.41)	1.50 (1.31-1.72)	1.72 (1.49-2.00)	2.02 (1.69-2.45)	2.26 (1.84-2.81)	2.51 (1.98-3.20)	2.77 (2.12-3.65)	3.12 (2.28-4.32)	3.40 (2.38-4.90)
30-min	0.704 (0.620-0.808)	0.840 (0.738-0.966)	1.02 (0.896-1.18)	1.17 (1.02-1.36)	1.38 (1.15-1.67)	1.54 (1.26-1.92)	1.71 (1.36-2.19)	1.89 (1.45-2.49)	2.13 (1.55-2.95)	2.32 (1.63-3.35)
60-min	0.495 (0.436-0.568)	0.591 (0.520-0.679)	0.719 (0.630-0.829)	0.825 (0.716-0.960)	0.972 (0.811-1.18)	1.09 (0.884-1.35)	1.21 (0.954-1.54)	1.33 (1.02-1.76)	1.50 (1.09-2.08)	1.63 (1.14-2.35)
2-hr	0.382 (0.336-0.438)	0.455 (0.400-0.523)	0.552 (0.484-0.636)	0.630 (0.547-0.734)	0.738 (0.616-0.894)	0.822 (0.669-1.02)	0.907 (0.718-1.16)	0.995 (0.762-1.31)	1.11 (0.812-1.54)	1.21 (0.844-1.74)
3-hr	0.334 (0.294-0.383)	0.397 (0.349-0.456)	0.480 (0.421-0.553)	0.547 (0.475-0.637)	0.639 (0.533-0.773)	0.709 (0.577-0.880)	0.780 (0.617-0.997)	0.853 (0.653-1.13)	0.951 (0.694-1.32)	1.03 (0.719-1.48)
6-hr	0.265 (0.233-0.304)	0.315 (0.277-0.362)	0.379 (0.332-0.437)	0.431 (0.374-0.502)	0.501 (0.418-0.606)	0.553 (0.450-0.687)	0.606 (0.479-0.774)	0.659 (0.505-0.870)	0.731 (0.533-1.01)	0.784 (0.549-1.13)
12-hr	0.198 (0.174-0.227)	0.238 (0.209-0.273)	0.289 (0.253-0.333)	0.329 (0.285-0.383)	0.382 (0.319-0.463)	0.422 (0.344-0.524)	0.462 (0.365-0.590)	0.502 (0.384-0.662)	0.554 (0.404-0.767)	0.592 (0.415-0.854)
24-hr	0.145 (0.130-0.165)	0.176 (0.158-0.201)	0.216 (0.193-0.247)	0.247 (0.219-0.284)	0.288 (0.247-0.342)	0.318 (0.268-0.385)	0.347 (0.286-0.430)	0.376 (0.302-0.479)	0.414 (0.320-0.548)	0.443 (0.331-0.604)
2-day	0.099 (0.089-0.113)	0.123 (0.110-0.140)	0.151 (0.135-0.173)	0.173 (0.154-0.200)	0.202 (0.173-0.239)	0.222 (0.187-0.269)	0.242 (0.199-0.300)	0.261 (0.210-0.332)	0.286 (0.221-0.378)	0.304 (0.227-0.415)
3-day	0.080 (0.072-0.091)	0.099 (0.089-0.113)	0.122 (0.109-0.140)	0.140 (0.125-0.162)	0.163 (0.140-0.194)	0.180 (0.151-0.218)	0.196 (0.161-0.242)	0.211 (0.169-0.268)	0.230 (0.178-0.304)	0.244 (0.183-0.333)
4-day	0.068 (0.061-0.077)	0.084 (0.075-0.096)	0.104 (0.093-0.119)	0.120 (0.106-0.138)	0.139 (0.120-0.165)	0.153 (0.129-0.186)	0.167 (0.137-0.206)	0.179 (0.144-0.228)	0.196 (0.151-0.259)	0.207 (0.155-0.283)
7-day	0.049 (0.044-0.056)	0.061 (0.054-0.069)	0.075 (0.067-0.086)	0.086 (0.076-0.099)	0.100 (0.086-0.119)	0.110 (0.093-0.133)	0.120 (0.098-0.148)	0.129 (0.103-0.164)	0.140 (0.108-0.186)	0.149 (0.111-0.203)
10-day	0.040 (0.035-0.045)	0.049 (0.044-0.056)	0.060 (0.054-0.069)	0.069 (0.061-0.080)	0.080 (0.069-0.095)	0.088 (0.074-0.107)	0.096 (0.079-0.119)	0.103 (0.083-0.131)	0.112 (0.087-0.148)	0.119 (0.089-0.162)
20-day	0.027 (0.024-0.030)	0.033 (0.030-0.038)	0.041 (0.036-0.046)	0.046 (0.041-0.053)	0.054 (0.046-0.064)	0.059 (0.049-0.071)	0.063 (0.052-0.078)	0.068 (0.055-0.086)	0.074 (0.057-0.097)	0.078 (0.058-0.106)
30-day	0.022 (0.020-0.025)	0.027 (0.024-0.031)	0.033 (0.030-0.038)	0.038 (0.034-0.044)	0.044 (0.038-0.052)	0.048 (0.040-0.058)	0.051 (0.042-0.064)	0.055 (0.044-0.070)	0.059 (0.046-0.078)	0.062 (0.046-0.085)
45-day	0.019 (0.017-0.021)	0.023 (0.021-0.026)	0.028 (0.025-0.032)	0.032 (0.028-0.037)	0.037 (0.031-0.043)	0.040 (0.033-0.048)	0.043 (0.035-0.053)	0.045 (0.036-0.058)	0.049 (0.038-0.064)	0.051 (0.038-0.069)
60-day	0.017 (0.015-0.019)	0.020 (0.018-0.023)	0.025 (0.022-0.028)	0.028 (0.025-0.032)	0.032 (0.027-0.038)	0.035 (0.029-0.042)	0.037 (0.030-0.046)	0.039 (0.032-0.050)	0.042 (0.032-0.055)	0.044 (0.033-0.060)

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

**FIGURE C:**  
 Nomograph for corrugated metal pipe (CMP), inlet control. (U.S. Dept. Commerce, 1963).



(STX-1: Blue, STX-2: Red)



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	Dan Egan			
Business/Agency	Happy Dreams Farm, LLC			
Mailing Address	P.O. Box 241			
City, State, Zip	Redcrest, CA, 95569			
Telephone	(707) 269-8048	Fax		
Email				

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

Name	Tyler Ledwith			
Street Address	517 3rd St. Suite 6			
City, State, Zip	Eureka, CA 95501			
Telephone	(707) 444-3800	Fax	(707) 444-3900	
Email	tledwith@manhard.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		Happy Dreams Farm Property Improvements		
B. Agreement Term Requested		<input checked="" type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> 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)	
2017	2022	07/01	10/15	15



**5. AGREEMENT TYPE**

Check the applicable box. If box B, C, D, E, or F is checked, complete the specified attachment.

A.	<input checked="" type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)	
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A)	Mine I.D. Number: _____
C.	<input type="checkbox"/> Timber Harvesting (Attachment B)	THP Number: _____
D.	<input checked="" type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C)	SWRCB Number: Pending _____
E.	<input type="checkbox"/> Routine Maintenance (Attachment D)	
F.	<input type="checkbox"/> Remediation of Marijuana Cultivation Sites (Attachment E)	
G.	<input type="checkbox"/> Department Grant Programs	Agreement Number: _____
H.	<input type="checkbox"/> Master	
I.	<input type="checkbox"/> 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	Point of Diversion - Spring Box	<\$5,000	\$561.00
2	Point of Diversion - Well	<\$5,000	\$561.00
3	STX-1 Culvert Replacement	<\$5,000	\$561.00
4	STX-2 Culvert Replacement	<\$5,000	\$561.00
5	Remediation	<\$5,000	\$3000.00
6			
7			
8			
9			
10			
		D. Base Fee (if applicable)	
		<b>E. TOTAL FEE*</b>	\$5,244.00

\* Check, money order, and Visa or MasterCard payments are accepted. When payment is made by credit card, CDFW shall assess a separate credit card processing fee of 1.6% to the Total Fee. Credit card payment must be submitted with a completed Credit Card Payment Authorization Form (DFW 1443b (Rev. 8/15)) available online at: <https://www.wildlife.ca.gov/Conservation/LSA/Forms> or at a Department regional office.



**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)

DIRECTIONS TO SITE  
 FROM EUREKA, CA  
 -TAKE US-101 S FOR APPROX.  
 41.8 MILES TO EXIT 663 - BULL CREEK FLATS ROAD  
 -TAKE LEFT ONTO BULL CREEK FLATS ROAD  
 -TAKE RIGHT ONTO US-254 AVENUE OF THE GIANTS  
 -TAKE LEFT ONTO DYERVILLE LOOP ROAD  
 -TRAVEL ON DYERVILLE LOOP ROAD FOR APPROX. 2 MILES  
 -PROJECT LOCATION WILL BE ON THE RIGHT: 1752 DYERVILLE LOOP ROAD, MCCANN, CA 95571

Continued on additional page(s)

B. River, stream, or lake affected by the project.    Unnamed Tributaries

C. What water body is the river, stream, or lake tributary to?    Eel River

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    Humboldt

F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Weott	01S	02E	36	SW
Weott	01S	02E	36	NW

Continued on additional page(s)

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

L. Assessor's Parcel Number(s)

211-151-017

Continued on additional page(s)



M. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)			
Latitude/Longitude	Latitude: 40.3362		Longitude: -123.9071
	<input type="checkbox"/> Degrees/Minutes/Seconds	<input checked="" type="checkbox"/> Decimal Degrees	<input type="checkbox"/> Decimal Minutes
UTM	Easting:	Northing:	<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27	<input checked="" type="checkbox"/> NAD 83 or WGS 84

**9. PROJECT CATEGORY**

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



**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.

The proposed agreement is for the following projects on the subject parcel:

Point of Diversion - Spring Box    40.3367°, -123.9122°  
 Point of Diversion - Well            40.3347°, -123.9100°  
 STX-1 Culvert Replacement        40.3347°, -123.9083°  
 STX-2 Culvert Replacement        40.3352°, -123.9080°

See attached project description

Continued on additional page(s)

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

Excavator, Dump Truck, Bull Dozer, Payloader, hand tools

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.

Any work on the spring will be confined to existing structure. Stream crossings will be treated to CDFW California Salmonid Stream Habitat Restoration Manual Part X standards. Disturbed riparian vegetation will be restricted to the vegetation adjacent to the fillslopes. Permanently removed fill will be stored in locations with no risk of sediment delivery.

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
Incidental Riparian	Linear feet: <u>40</u> Total area: <u>120</u>	Linear feet: <u>0</u> Total area: <u>0</u>
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)

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 list.

Continued on additional page(s)

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

CA Department of Fish and Wildlife BIOS CNDDDB Quickview

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, WILDLIFE, AND PLANT RESOURCES

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

The proposed projects are not expected to contribute sediment to the Class III watercourses. All work will be done during the summer months when the streams are dry will conform with CDFW California Salmonid Stream Habitat Restoration Manual Part X. Fill to be permanently removed will be stored in designated locations, with no risk of sediment delivery

Continued on additional page(s)

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

No significant impact to fish, wildlife or plant resources are expected from the proposed projects. The projects will limit erosion on the property and therefore reduce sediment contribution to downstream aquatic habitat. Work will only occur during the period of dry, unsaturated conditions to avoid impacts on fish and aquatic habitat. Vegetation will only be removed from sites where it is growing on anthropogenically placed fill material.

Continued on additional page(s)

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

N/A

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. Humboldt County Cannabis Cultivation Permit  Applied  Issued
- B. Initial Statement of Diversion and Use - SWRCB  Applied  Issued
- C. NCRWQCB Oder 2015-0023 - NCRWQCB  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)

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 California Department of Fish and Wildlife

E. Contact Person Jennifer Olson F. Telephone Number

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).

The applicant intends to become a compliant cultivator pursuant of the Humboldt County Medical Marijuana Land Use Ordinance.

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)

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*) Tyler Ledwith, Manhard Consulting at (*insert telephone number*) (707) 444-3800 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

\_\_\_\_\_  
 Date

Tyler Ledwith  
 \_\_\_\_\_  
 Print Name